

## Section 4.0 - Proposed Methodology for Reengineering and Re-solutioning

### 4.0.1 Introduction

In presenting our vision for reengineering and re-solutioning the Commonwealth's business processes, we hope to have shared our excitement and enthusiasm for the opportunity to work with your team in meeting and mastering the challenges ahead. The Commonwealth Partner's experience with and investment in the Commonwealth is demonstrated by the effort put forth in due diligence and in preparing the compilation of our findings and recommendations in this proposal document. But our value as partners for the Commonwealth goes far beyond our knowledge of the Commonwealth itself. We are long-established worldwide practitioners of business transformation for organizations of all sizes in all industries, and we offer a globally recognized, market-proven, track-tested array of tools and techniques to assist our customers in managing the risks of large-scale reengineering and re-solutioning programs.

The marketplace for systems integration and management places great value on methods and tools that ensure predictable, repeatable results, with the objective of minimizing the risk of business disruption. System integrators like us have been challenged by our customers to develop standardized methodologies and technologies for project management and risk management. Much of the value that we offer the Commonwealth in our partnership comes from our ability to leverage our experience with similar projects and to deploy proven, standardized tools and methods. In the following section, we offer some details of those tools and methods that our customers have found most effective.

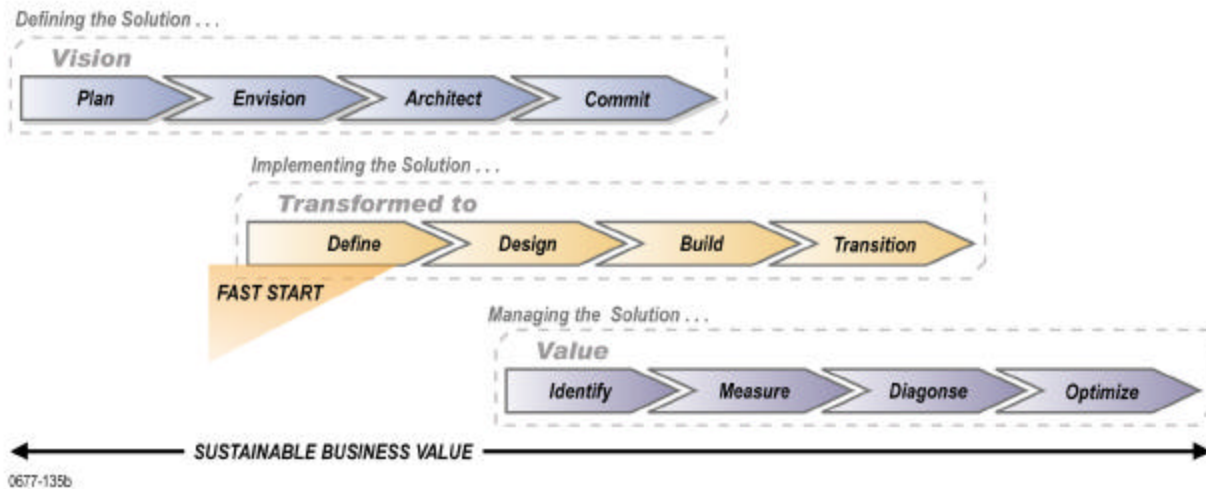
### 4.1 Program Management Approach

The Commonwealth Partners proposes to use a program management approach that has been very effective and successful on other programs similar in size, scope and complexity to the Enterprise Applications (EA) PPEA. This PPEA program will be managed as a portfolio of six projects that make up the scope at the beginning of the program. Dividing the program effort into manageable

The Commonwealth Partners' recommended approach for managing this project will deliver a risk balanced, paced and deliberate implementation of your objectives by using proven methods to define the work to be done, managing the work as Releases to focus the team on the project objectives and managing the team by functional competencies to deliver consistent high quality project deliverables and artifacts.

projects will enable effective, focused management of the logical work streams that have been identified as projects, to facilitate the application of the different methods and management required. The Enterprise Applications PPEA Program Manager will manage and coordinate the individual projects that make up the Enterprise Applications PPEA program through individual project managers. The Program Manager will establish a Program Management Office (PMO) to support the program and the individual project managers with the systems, procedures and artifacts necessary to manage the entire program while maintaining the consistent application of standards to each individual project.

The IBM Business Consulting Services Enterprise Application Implementation methodology, Vision to Value, is a combination of leading practices and proven methods derived from our years of consulting experience. Taking into consideration the application architecture and development tools of EA applications, the methodology provides approaches to accelerate the overall implementation schedule while effectively managing risk. The methodology will assist the Commonwealth in obtaining its objectives by:



- Leveraging a consistent approach to engagement management and project delivery allowing our people to be more productive
- Using the selected enterprise application's business configuration models and associated development tools for rapid development of reports, customizations, interfaces and conversions
- Employing interactive business modeling workshops to expose users to the applications, validate system processes and configuration through prototyping, and secure early buy-in to the design
- Emphasizing business process reengineering around the package-enabled practices within the applications; thereby encouraging “vanilla” implementations to minimize ongoing maintenance and upgrade costs
- Engaging user “experts” from the business during key aspects of the projects to attain buy-in, ownership and knowledge transfer
- Increasing project efficiencies by integrating accelerators and selected tools into each phase of the methodology; this includes templates and practice aids to address key EA issue areas such as: reporting, security, technical infrastructure, database utilities, etc.
- Providing accurate and consistent advice to our clients by using a single firm wide content source

The Worldwide Project Management Method (WWPMM) is IBM project management methodology that will support this approach and provide a systematic and highly detailed description of procedures to be followed to accomplish the scope of work. The methodology

includes forms, checklists and templates for all of the knowledge and domains of the program management model. This program management approach will promote and facilitate smooth, logical and harmonious team synergy and cooperation.

WWPMM is based on the Project Management Institute's internationally recognized framework, the Project Management Body of Knowledge (PMBOK®). The IBM project management method traces its heritage directly back to the basic principles of the PMBOK® and adds focused extensions for better applicability to Information Technology (IT) applications. In addition to recognizing the leading practices established in the PMBOK®, the developers of IBM's project management method looked to other established

The Project Management Body of Knowledge (PMBOK) is an inclusive term that describes the sum of knowledge within the profession of project management. As with other professions such as law, medicine, and accounting, the body of knowledge rests with the practitioners and academics that apply and advance it. The full project management body of knowledge includes knowledge of proven, traditional practices that are widely applied as well as knowledge of innovative and advanced practices that have seen more limited use.  
— Project Management Institute (PMI)  
Introduction to the PMBOK®

methods and standards like IEEE, ISO 10006, and the Software Engineering Institute Capability Maturity Model Integration (SEI—CMMI) for guidance and direction. The resulting method, deployed for corporate wide application and used by the 16,000 project managers in IBM, represents the result of this research filtered through the successful delivery of thousands of IT projects.

## 4.2 Organization

The vendor must fully address how they propose the partnership be organized in terms of leadership and governance for the primary purpose of setting direction, prioritizing, and evaluating, reengineering and re-solutioning processes. This must include, but shall not be limited to, individual and group roles and responsibilities, relationship descriptions, authority levels and other such similar topics that must be addressed to form a collaborative high-performing team.

### The Commonwealth Partners' Response

#### Implementation

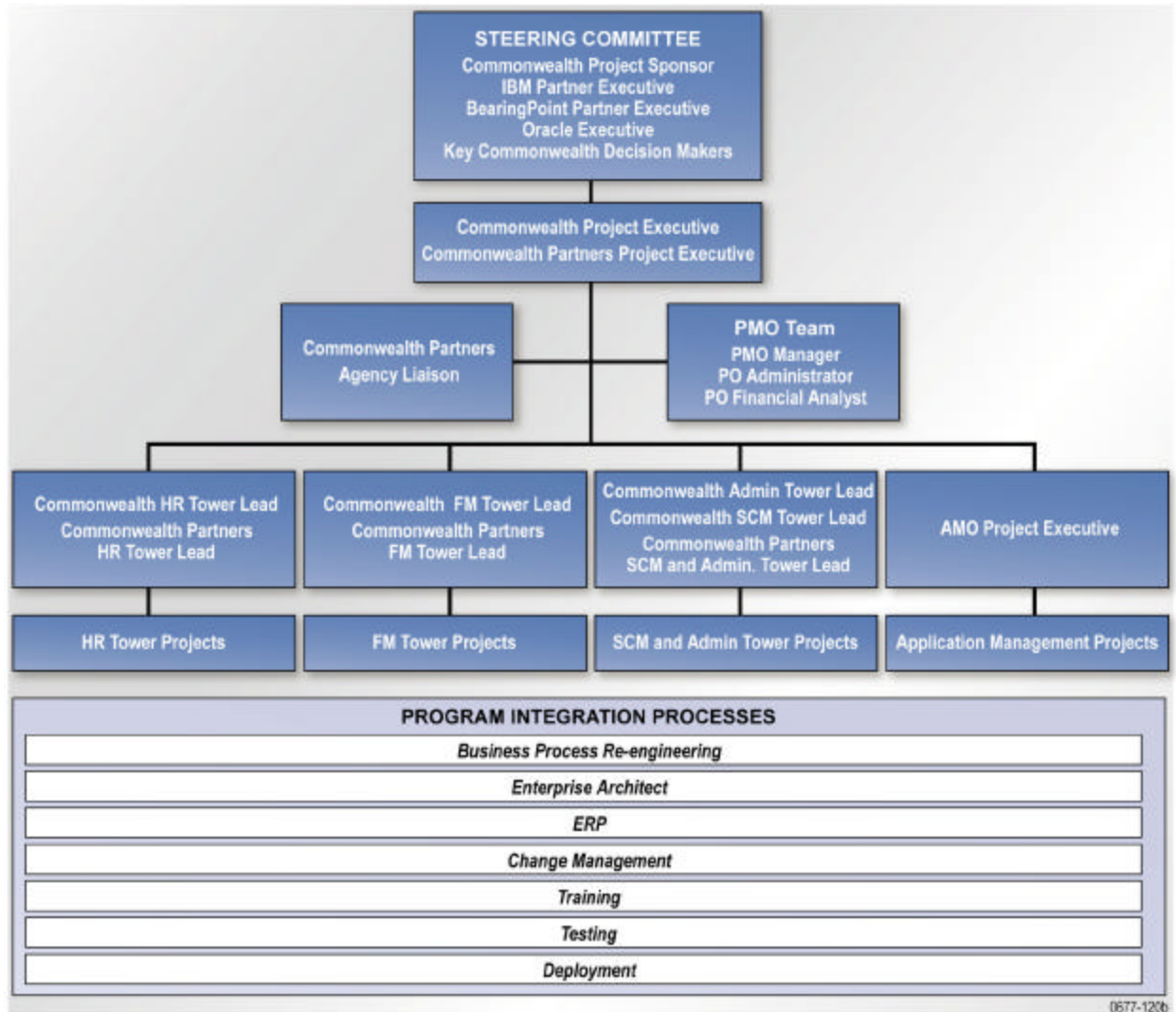
The Enterprise Applications PPEA team is broken down into five different towers that are identified below:

- Administrative Management Tower
- Financial Management Tower
- HR Management Tower
- Supply Chain Tower
- IT Management Tower

These towers correspond to the major reengineering and re-solutioning process that will be undertaken as defined in the proposal.

The Commonwealth Partner team organization structure, in Figure 4-1, shows how the Program Manager will effectively oversee the five towers and other activities that make up the Enterprise Applications PPEA Program.

**Figure 4-1: Commonwealth Partners' Proposed Organization Structure**



The Enterprise Applications PPEA Program Manager will have day-to-day management responsibility and the authority necessary to manage the Enterprise Applications PPEA Program. In addition, there will be a Project Manager for each Tower (Administration, Financial, HR, Supply Chain and IT). The Program Executives and the Project Managers from both the Commonwealth and the Commonwealth Partners will be part of the Program Management Office (PMO). The roles and responsibilities for the team members are captured in Table 4-1.

**Table 4-1: Team Members Roles and Responsibilities**

Functional Role	Responsibilities
<b>Project Executive</b>	<ul style="list-style-type: none"> <li>Provides overall direction and oversight to the program</li> <li>Acts as the primary liaison between the Commonwealth Partners and the Commonwealth</li> <li>Develops and implements a future vision for the partnership</li> <li>Works with the Commonwealth to resolve contract-related issues throughout the life of the program</li> <li>Reviews and recommends modifications to the overall schedule, scope, or deliverables prior to submitting them to the Commonwealth for approval</li> <li>Maintains open lines of communications with project managers through regular meetings and communications</li> <li>Holds final decision-making authority for this program</li> </ul>
<b>Agency Liaison</b>	<ul style="list-style-type: none"> <li>Provides overall management of the relationship between the Commonwealth Partners and the Commonwealth</li> <li>Works with key agency stakeholders to understand their objectives and concerns and communicates these ideas back to the Commonwealth Management Team</li> <li>Uses that understanding to work in conjunction with the Commonwealth Management Team to formulate joint objectives, plan for execution, and measure outcomes</li> <li>Serves as a focal point for bringing new ideas and approaches to agencies to win early approval for solution</li> <li>Liaises with the Commonwealth Management Team to monitor overall customer satisfaction</li> <li>Manages expectations of Commonwealth stakeholders and operational users</li> </ul>
<b>Project Management Office (PMO) Manager</b>	<ul style="list-style-type: none"> <li>Works closely with the Project Executive and assists in the management of the Commonwealth relationship</li> <li>Runs the Project Management Office and oversees all project managers to ensure project schedules are adhered to, high quality deliverables are produced and service levels are optimized</li> <li>Acts as a facilitator for cross functional services</li> <li>Focuses on the day-to-day management and interactions between the Commonwealth Partners and the Commonwealth agencies</li> <li>Proactively identifies and recommends solutions that bring value to the Commonwealth</li> </ul>
<b>Project Office (PO) Administrator</b>	<ul style="list-style-type: none"> <li>Manages the project schedules and plans components so that they are consistently tracked and maintained</li> <li>Provides project support services to the Commonwealth project team</li> <li>Prepares monthly program status reports and scorecards</li> <li>Defines project management processes</li> <li>Manages Project Office administration</li> </ul>
<b>PO Financial Analyst</b>	<ul style="list-style-type: none"> <li>Monitors and manages financial administration practices and procedures associated with the Agreement, including processing invoices, resolving financial issues</li> <li>Establishes financial controls</li> <li>Monitors budget performance, identifies variances, and recommends corrective action</li> <li>Operates as the primary contact for all billing and financial issues</li> <li>Reviews charges and performance credits</li> </ul>
<b>Human Resources (HR) Tower Lead</b>	<ul style="list-style-type: none"> <li>Introduces industry best practices, HR transformation strategies and techniques, and provides PeopleSoft implementation expertise</li> <li>Conducts knowledge transfer to the Commonwealth project leads in connection with the key elements listed above</li> <li>Works with project managers to develop implementation schedules and achieve outlined objectives</li> <li>Acts as a liaison to Project Executive to provide HR project status</li> </ul>



Functional Role	Responsibilities
	<ul style="list-style-type: none"> <li>Manages relationship with Commonwealth HR project executives</li> <li>Defines and identifies core data elements and processes in conjunction with the Commonwealth's functional team</li> <li>Manages the delivery and sign-off for work products</li> <li>Performs administrative duties such as project status reports and staff evaluations</li> </ul>
<b>Financial Management (FM) Tower Lead</b>	<ul style="list-style-type: none"> <li>Introduces industry best practices, financial transformation strategies and techniques, and provides PeopleSoft implementation expertise</li> <li>Conducts knowledge transfer to the Commonwealth project leads in connection with the key elements listed above</li> <li>Works with project managers to develop implementation schedules and achieve outlined objectives</li> <li>Acts as a liaison to Project Executive to provide FM project status</li> <li>Manages relationship with Commonwealth FM project executives</li> <li>Defines and identifies core data elements and processes in conjunction with the Commonwealth's functional team</li> <li>Manages the delivery and sign-off for work products</li> <li>Performs administrative duties such as project status reports and staff evaluations</li> </ul>
<b>Administrative Management (AM) and Supply Chain Management (SCM) Tower Lead</b>	<ul style="list-style-type: none"> <li>Introduces industry best practices, Administrative Management and Supply Chain Management transformation strategies and techniques, and provides software implementation expertise</li> <li>Conducts knowledge transfer to the Commonwealth project leads in connection with the key elements listed above</li> <li>Works with project managers to develop implementation schedules and achieve outlined objectives</li> <li>Manages relationship with software vendors</li> <li>Acts as a liaison to Project Executive to provide AM and SCM project status</li> <li>Manages relationship with Commonwealth AM and SCM project executives</li> <li>Defines and identifies core data elements and processes in conjunction with the Commonwealth's AM and SCM teams</li> <li>Manages the delivery and sign-off for work products</li> <li>Performs administrative duties such as project status reports and staff evaluations</li> </ul>
<b>AMO Project Executive</b>	<ul style="list-style-type: none"> <li>Introduces industry best practices to lead the transformation to SEI CMML, state of the art processes and procedures for application maintenance</li> <li>Manages AMO Delivery and subcontractor staff</li> <li>Obtaining technical resources for planning, projects, and/or new services</li> <li>Works with project managers to develop project schedules and achieve outlined objectives</li> <li>Manages the delivery and sign-off for work products</li> <li>Performs administrative duties such as project status reports and staff evaluations</li> </ul>
<b>Enterprise Architect</b>	<ul style="list-style-type: none"> <li>Provides overall management and validation of the technical solution</li> <li>Defines enterprise-wide technical standards and guidelines</li> <li>Improves the consistency, timeliness, quality, security, and delivery of data</li> <li>Works with Tower Leads and project managers to define individual project architectural designs as well as integration points</li> <li>Maps data sources</li> <li>Leads in the evaluation and use of technologies to align with change in the Commonwealth's business environment</li> </ul>
<b>Training/Change Management Lead</b>	<ul style="list-style-type: none"> <li>Holds accountability for addressing personnel transformation issues and mitigates organizational risks</li> <li>Achieves critical change management objectives associated with Enterprise Applications PPEA</li> <li>Owns business, organizational, &amp; leadership alignment</li> <li>Owns user readiness &amp; adoption</li> </ul>

Functional Role	Responsibilities
	<ul style="list-style-type: none"><li>Manages the development and consistent delivery of a standardized toolkit across the program</li><li>Executes effective, strategic communication strategies and plans to build relationships of trust, manages expectations, encourages commitment, and minimizes resistance to change</li><li>Designs and delivers a comprehensive end-user training program</li></ul>
<b>Deployment Manager</b>	<ul style="list-style-type: none"><li>Develops enterprise-wide deployment plan</li><li>Works with project teams to develop necessary deployment documentation</li><li>Liaises with agency staff to coordinate deployment activities</li><li>Manages deployment activities</li><li>Secures necessary deployment sign-offs</li></ul>
<b>Test Manager</b>	<ul style="list-style-type: none"><li>Develops enterprise-wide testing strategy and plan</li><li>Coordinates testing activities between the functional and technical teams</li><li>Documents test progress and results</li><li>Tracks and reports the testing incidents</li><li>Assists in troubleshooting potential errors with the application, interface, custom object, or test scripts</li><li>Teaches the team members effective testing techniques</li></ul>

The Program Governance model enables joint (Commonwealth and the Commonwealth Partners) guidance of the Enterprise Applications PPEA program in the delivery of the Commonwealth's vision. Included in the Governance should be the proposal, our response, and the contract between the Commonwealth and Commonwealth Partners.

Governance encompasses the roles, the responsibilities and the accountabilities of the organizations and the individuals in the Model. It further defines the processes and the decision rights of the organizations and individuals.

The Commonwealth Partners have experience integrating Governance into the management of large complex projects. Our recommendations have proven to maximize the likelihood of success in delivering the project goals and the project benefits. Governance is part of Program Management and is integrated across all aspects of management and execution of the project.

Our governance approach will assist the Commonwealth in achieving the project goals by:

- Building linkage, communication and collaboration between the project team at all levels and across other major organizations and stakeholders, bringing stakeholders together for a common purpose.
- Assisting in the delivery of the organizations' strategic program benefits.

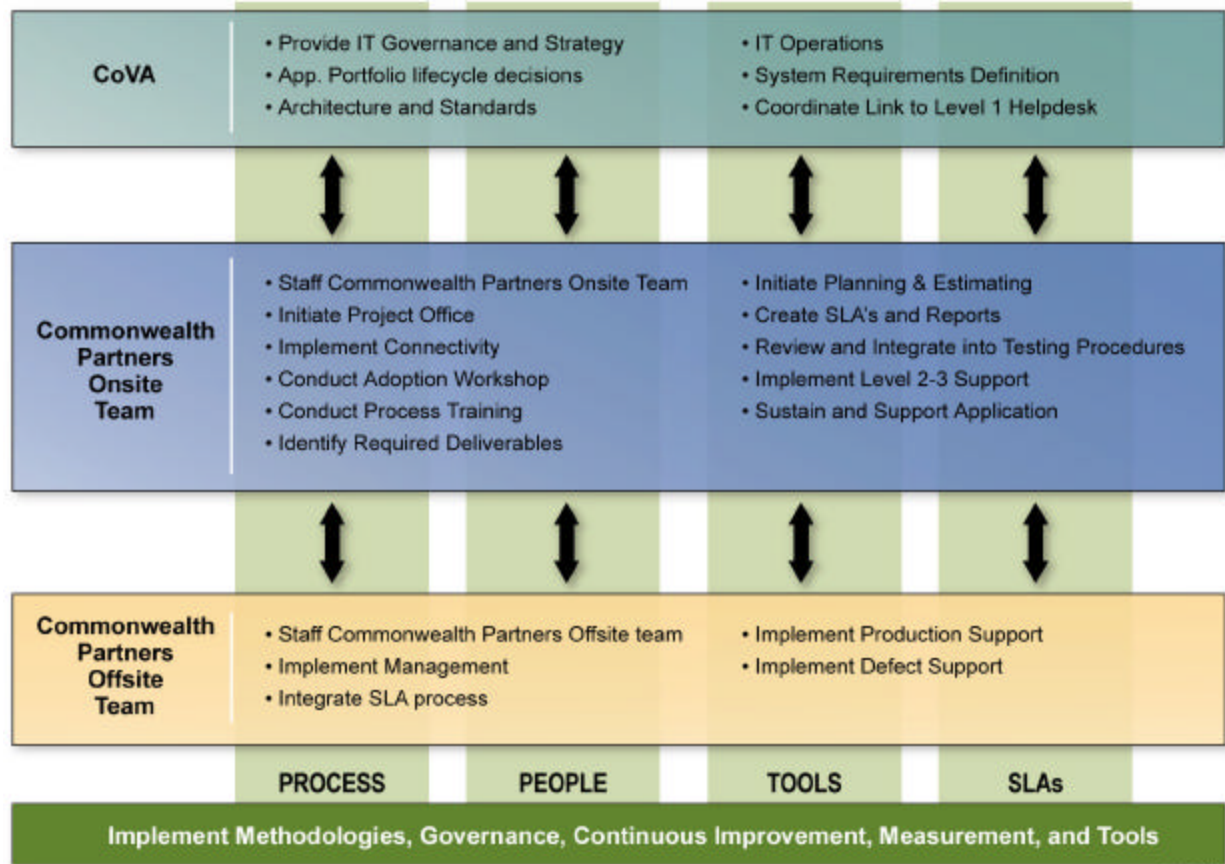
### Maintenance

The Commonwealth Partners Application maintenance delivery for the Commonwealth will be based on the utilization of the Commonwealth Partners multi-tiered, integrated approach to supporting application maintenance. This allows the Commonwealth to take advantage of a combination of the communication benefits of on-site project team members as well as the resource flexibility of performing work in a shared resource center. The responsibilities of the teams are described as follows:

- **Commonwealth of Virginia** – The Commonwealth’s team will manage the overall program as well as acting as a liaison to the Commonwealth agencies. Functions will include the definition of business requirements, high level design approvals, coordination of acceptance testing, and management of schedules, working with our on-site team. We will also look to the Commonwealth to review and sign off on all deliverables
- **Commonwealth Partners On-site Team** – The Commonwealth Partners on-site team will be located in Commonwealth sites in Richmond, Virginia. This team will consist of employees hired from the Commonwealth, IBM heritage employees and project office personnel. The team will work with the Commonwealth to implement and manage the demand management process. They will also provide application subject matter expertise; external and high level design, and problem resolution, and serve as the point of interface for Commonwealth business analysts or, potentially, end users for some applications. The on-site team will be lead by the Commonwealth Partners’ Enterprise Application Manager, who will manage the overall Legacy Application Maintenance effort.
- **Commonwealth Partners Off-site Team** – The Commonwealth Partners off-site team will consist of Commonwealth Partners personnel based in Virginia. The Commonwealth Partners will have dedicated resources assigned to the Commonwealth in a dedicated Commonwealth workspace. These resources will have participated throughout knowledge transfer to understand specific application maintenance requirements. These resources will interface with the Commonwealth Partners on-site team on at least a daily basis. They will perform internal, lower level design tasks, programming and unit testing, problem resolution where necessary, production support, estimating, and defect support under a common methodology that is shared throughout the Commonwealth Application Services organization. Project management and coordination will occur on an ongoing basis with the Commonwealth Partners on-site team.



**Figure 4-2: Commonwealth Partners' Delivery Structure**



0577-043b

### 4.3 Scope Definition

The vendor must propose a strategy for and define the criteria for determining which specific business process sub-categories with the Enterprise Business Architecture are optimally encompassed within the proposed enterprise solution. To the degree possible, based on due diligence information gathered and best practice experience and knowledge, the vendor is also encouraged to define and delineate between proposed in-scope business processes and out-of-scope processes on both an enterprise-wide and agency-by-agency basis. The vendor must describe the strategy for interface and/or integration with the proposed enterprise solution for business processes initially (or ultimately) determined to be out-of-scope at either the statewide or agency level. Fully explain and justify assertions, assumptions and proposed solutions.

### The Commonwealth Partners' Response

#### Implementation Scope and Approach

The Commonwealth Partners approach to establishing the scope for Enterprise Applications is to make a preliminary determination based on the Commonwealth's Enterprise Business Architecture (EBA) and the due diligence, which called out four specific business process areas: Administrative Management, Financial Management, Human Resources Management, and

Supply Chain Management. In our subsequent analysis, and in preparing this proposal, we have further refined the scope based on the business case that we have developed and that we present in Section 5 of this document. This is a high level scope definition. Setting and validating detailed scope is an iterative process, and we expect to continue this process with the Commonwealth's participation through the initial phases of each enterprise initiative that we have proposed. Each project plan will present a work breakdown structure that incorporates the scope setting tools and methods from our Worldwide Project Management Method (WWPMM). In all cases, we propose to include in scope only those business processes where we detect a substantiated business case in terms of quantifiable financial inflows and/or cost savings, evaluated both at the enterprise and agency level.

Using the seven-year planning horizon specified by the Commonwealth, we developed our Solution Roadmap—described in detail in Section 3—as a high level, preliminary definition of scope organized into different projects, each of which calls for particular solutions to be implemented in support of particular reengineered business processes for particular agencies (or groups of agencies).

In developing the Solution Roadmap, we identified certain projects as near-term opportunities to be realized within a timeframe of 24 months or less. We consider an opportunity to be near-term for one or more of the following reasons:

- It addresses an urgent risk of business disruption in one or more mission-critical business processes
- It corresponds to an initiative that is already funded
- It corresponds to an initiative that is already underway
- It will generate new revenue or cost reduction that will achieve payback of the implementation cost within the 24-month timeframe

Our proposal offers the Commonwealth a fixed price for the near-term opportunities in the Statement of Work (SOW) that is attached at Schedule 2.2. In addition, our Solution Roadmap includes longer term opportunities for the rollout of Enterprise Applications over the Commonwealth's seven-year planning horizon for which our Fee Schedule provides an estimate for budgeting and planning.

Table 4-2 summarizes the Enterprise Applications projects proposed on our Solution Roadmap, separating the near-term opportunities from the rollout opportunities.

**Table 4-2: Scope Definition by Enterprise Applications Projects**

Project	Agencies	Estimated Timeframe
<b>Near-Term Opportunities (Fixed Price)</b> <i>Please refer to our Fee Schedule for actual and estimated fees.</i>		
<b>Administrative Management and Supply Chain Management</b>		
Tririga Facilities Management System	DGS	Jan. 2006-Feb. 2007
Provia ViaWare Warehouse Management System	DOC, VCE	Jan. 2006-May 2007

Project	Agencies	Estimated Timeframe
<b>Financial Management</b>		
Finance Global Blueprint	All	Jan. 2006-July 2006
Re-implementation of PeopleSoft Financials for VDOT	VDOT	Aug. 2006-Aug. 2007
Fraud and Abuse Management (FAMS)	DMAS	Jan. 2006-June 2006
<b>Human Resources Management</b>		
PeopleSoft Candidate Gateway and Talent Acquisition Manager (e-Recruiting)	All	Jan. 2006-Jan. 2007
<b>Information Technology</b>		
Application Management Operations - Legacy Applications	All	Dec. 2005-Dec. 2012
Enterprise Application Integration Services	All	Dec. 2005-Sept. 2007
<b>Enterprise Applications Rollout (Budget &amp; Planning Estimate)</b>		
<b>Administrative Management and Supply Chain Management</b>		
Maximo Enterprise Asset Management System	DOC, VCE, VSP	July 2006-Sept. 2007
	VDOT Fleet, Inventory, Equipment	July 2007-Nov. 2008
	VDOT Major Equipment Database	Jan. 2008-Aug. 2008
	Upgrade	Dec. 2008-Mar. 2009
	Wave 1 (Other Agencies To Be Determined)	Apr. 2009-Jan. 2010
	Wave 2 (Other Agencies To Be Determined)	Feb. 2010-Nov. 2010
	Wave 3 (Other Agencies To Be Determined)	Dec. 2010-Sept. 2011
Tririga Facilities Management System	DOC, VSP	Mar. 2007-Dec. 2007
	VDOT	Jan. 2008-Oct. 2008
	Wave 1 (Other Agencies To Be Determined)	Nov. 2008-June 2009
	Upgrade	July 2009-Sept. 2009
	Wave 2 (Other Agencies To Be Determined)	Oct. 2009-May 2010
eVA Initiatives	All	July 2006-Dec. 2008
Provia ViaWare Warehouse Management System	VDC	July 2007-Nov. 2007
<b>Financial Management</b>		
Oracle Consolidation	DMV, DOE, DMAS, DEQ, DSS	Aug. 2006-Mar. 2007
PeopleSoft Consolidation	DGS, VITA	Sept. 2007-Apr. 2008
CARS Replacement	All Non-ERP agencies	May 2008-June 2009
Fusion Transition	All	Jan. 2011-Sept. 2011
Fraud Abuse Management System (FAMS) Prioritization and Rollout	DSS, Other Agencies To Be Determined	Oct. 2007-Sept. 2008

Project	Agencies	Estimated Timeframe
Financial Dashboards	All	Jan. 2008-Sept. 2008
<b>Human Resources Management</b>		
Time and Labor Solution	VSP, DJJ, DMV, TAX, VEC	July 2006-June 2007
Kronos Interface	Kronos Agencies	July 2007-Jan. 2008
Time and Labor Solution	Other Agencies To Be Determined	July 2007-Apr. 2008
Core HR, Benefits and Employee Self-Service	All	July 2006-Dec. 2007
HR Dashboard	All	Mar. 2007-Dec. 2007
Manager Self-Service, Grievance and Data Warehouse	All	Jan. 2008-Dec. 2008
PeopleSoft HR Upgrade	All	Jan. 2010-Dec. 2010
Payroll, ePay	All	July 2006-Dec. 2007
Performance Evaluation	All	Jan. 2008-Dec. 2008

### Scope Management

We have proposed that the Commonwealth establish an Enterprise Center of Excellence (COE) as a cooperative among the business process owners in Administrative Management, Financial Management, Human Resources Management, and Supply Chain Management. We regard the COE as the essential scope management mechanism for the Commonwealth. The role of the COE is to manage the Enterprise Business Process Model and the Enterprise Applications Managed Solutions Portfolio, as described in Section 3 of this document, through and beyond implementation of individual solutions for individual agencies.

Our proposal includes consulting services for assistance in establishing the COE, in creating its charter, determining its membership, and documenting its operating procedures. One of the crucial functions of the COE is to determine what business processes are in or out of scope, making distinctions between agencies where that is relevant in terms of business requirements.

The COE contains Competency Groups of subject matter experts and business analysts who participate primarily on a part-time basis. Some Competency Groups may be considered permanent, such as those aligned on the four process areas of Administrative Management, Financial Management, Human Resources Management, and Supply Chain Management. Other Competency Groups may be assembled temporarily by the COE on an ad hoc basis to address a particular initiative. The Competency Groups will operate as process-oriented interest groups with a problem-solving focus. Their purpose is to respond with decisiveness and agility to changes in the Commonwealth's business requirements, which may differ across agencies, and changes in the supporting technology. The Competency Groups are the keepers of best business practices for the Commonwealth's business processes and the owners of the key performance indicators (KPI) that drive management reporting and ultimate accountability for results in delivering services to the public. It is then the role of the COE to keep the Competency Groups in step and compliant with the Enterprise Business Process Model and the Enterprise Applications Managed Solutions Portfolio, so that these evolve in a managed, measured, cost-justified fashion.

**Figure 4-3: Relationship Between the Center of Excellence (COE) and Competency Groups**



### Enterprise Integration

The Commonwealth Partners' proposed phased implementation approach for Enterprise Applications will require integration development, including interfaces, between different applications, and some of these interfaces will be temporary based on the sequence of bringing new systems online and retiring legacy systems.

The Commonwealth Partners propose to provide Enterprise Application Integration services to the Commonwealth that consist of designing an ESB (Enterprise Service Bus), installing a message broker, and designing, building, and deploying adapters to the Commonwealth production environment. The message broker will be the first component connected to the ESB and will provide routing, transformation, and logging services to applications that are connected to the ESB. Adapters will be built and deployed that allows legacy applications to connect to the ESB. What adapters are built when in the project schedule will be driven by what applications will need to be connected to the ESB. An evolutionary approach will be taken when building the ESB and components will be added and adapters built as needed by the Commonwealth.

Please refer to Section 3.5 of this document for a more detailed description of the ESB.



## 4.4 Scope Expansion/Contraction

The vendor must define how it would approach changes in scope to the partnership. As political and business conditions evolve, it is possible that the partnership may need to adjust its scope in terms of the enterprise and the processes eligible for reengineering and re-solutioning. The vendor must explain its approach to this.

### The Commonwealth Partners' Response

#### Implementation

##### Project Change Control Procedure

Before the start of the project a formal Statement of Work (SOW) will be executed between IBM and the Commonwealth. The standard change control process we will include in the proposed SOW will be:

“The following process will be followed if a change to this SOW is required.

A Project Change Request (PCR) will be the vehicle for communicating change. The PCR must describe the change, the rationale for the change, and the effect the change will have on the project.

The designated Project Manager of the requesting party will review the proposed change and determine whether to submit the request to the other party.

Both Project Managers will review the proposed change and recommend it for further investigation or reject it. The Commonwealth Partners will specify any charges for such investigation. A PCR must be signed by authorized representatives from both parties to authorize investigation of the recommended changes. The Commonwealth Partners will invoice the Commonwealth for any such charges. The investigation will determine the effect that the implementation of the PCR will have on price, schedule and other terms and conditions of the Agreement.

A written Change Authorization and/or PCR must be signed by authorized representatives from both parties to authorize implementation of the investigated changes. Until a change is agreed in writing, both parties will continue to act in accordance with the latest agreed version of the SOW.”

#### Issue Management

Project issues are one of the key indicators of a project's progress and an issue is any situation that threatens progress. Issues may arise for a variety of reasons and, for the Commonwealth project to achieve success, must be resolved on a timely basis.

The Project Manager will meet with the team leads on a weekly basis to review and address issues that are affecting the project's progress against the plan. Agreed actions are then cascaded down to the appropriate owners for implementation. This process simplifies and focuses attention only on key issues.



We will structure the process to reflect the hierarchy of the project team (as depicted in Figure 4-4).

```

graph TD
    subgraph TEAM_MEMBERS [TEAM MEMBERS]
        ID[Identify & Document Issue] --> AA[Assign to Appropriate Person(s)]
        AA --> RI[Research Issue]
        RI --> AI[Address Integration Issues]
        AI --> DAS[Document Alternative Solutions]
        DAS --> CIR[Can Issue be resolved?]
        CIR -- Yes --> DR[Document Resolution]
        DR --> GCCP[Go to Change Control Process]
        GCCP --> CI[Close Issue]
        CI --> FIR[Final Integration Review and Sign-off]
    end

    subgraph ISSUE_MANAGEMENT_COUNCIL [ISSUE MANAGEMENT COUNCIL]
        RI --> PIR[Preliminary Integration Review]
        PIR --> II{Integration Issue?}
        II -- No --> RI
        II -- Yes --> IIT[Identify Impacted Team(s)]
        IIT --> CIR
        CIR --> CIR
    end

    subgraph TEAM_LEADS [TEAM LEADS]
        PIR --> DAS1[Discuss Alternative Solutions]
        DAS1 --> MD1{Make Decision?}
        MD1 -- Yes --> CIR
        MD1 -- No --> DAS2[Discuss Alternative Solutions]
    end

    subgraph PROJECT_MANAGEMENT_OFFICE [PROJECT MANAGEMENT OFFICE]
        DAS2 --> MD2{Make Decision?}
        MD2 -- Yes --> CIR
        MD2 -- No --> MD3[Make Decision]
    end

    subgraph STEERING_COMMITTEE [STEERING COMMITTEE]
        MD3 --> PFB[Provide Feedback to PMO]
        PFB --> RF[Receive Feedback]
        RF --> MD2
    end
  
```

The flowchart illustrates the Change Control Process, organized into five horizontal lanes representing different organizational levels:

- TEAM MEMBERS:** The process begins with 'Identify & Document Issue', followed by 'Assign to Appropriate Person(s)', 'Research Issue', 'Address Integration Issues', and 'Document Alternative Solutions'. A decision point 'Can Issue be resolved?' leads to 'Document Resolution' (Yes) or back to 'Research Issue' (No). 'Document Resolution' leads to 'Go to Change Control Process', which then leads to 'Close Issue' and 'Final Integration Review and Sign-off'.
- ISSUE MANAGEMENT COUNCIL:** 'Research Issue' leads to 'Preliminary Integration Review'. A decision point 'Integration Issue?' leads to 'Identify Impacted Team(s)' (Yes) or back to 'Research Issue' (No). 'Identify Impacted Team(s)' leads to 'Discuss Alternative Solutions'.
- TEAM LEADS:** 'Preliminary Integration Review' leads to 'Discuss Alternative Solutions'. A decision point 'Make Decision?' leads to 'Document Resolution' (Yes) or back to 'Discuss Alternative Solutions' (No).
- PROJECT MANAGEMENT OFFICE:** 'Discuss Alternative Solutions' leads to another 'Make Decision?' decision point. If 'Yes', it leads to 'Document Resolution'. If 'No', it leads to 'Make Decision'.
- STEERING COMMITTEE:** 'Make Decision' leads to 'Provide Feedback to PMO', which leads to 'Receive Feedback'. 'Receive Feedback' leads back to the 'Make Decision?' decision point in the Project Management Office lane.

## **Roles in the Issue Management Process**

### **Team Members**

Each functional team will track the issues for which they are responsible in the program office tool. Each issue will be prioritized for impact. High priority issues, and any issue, which cannot be resolved within the functional team, will be escalated.

### **Issue Management Review**

Issues are reviewed by the Commonwealth and Commonwealth Partners' team leads and the integration lead. They will determine the impact of issues on other teams. It's their responsibility to identify and notify all teams impacted by the issue. After all the research has been completed and a resolution proposed, the issue will have a final review and sign off of integration issues on the project.

### **Team Leads**

Each team lead will be responsible for the resolution of issues impacting their team. Team leads will be involved with the resolution process by guiding the team through researching the issue, developing a resolution and driving to a timely decision based on the resolution.

### **Program Management Office**

The Commonwealth and the Commonwealth Partners' program management will manage the overall set of project issues, allocating responsibilities across the project team as necessary. Where program management is unable to resolve the issue within the project, they may seek assistance from outside the project or guidance from the Commonwealth Executive Steering Committee.

### **Steering Committee**

Should the project need to refer high impact issues to the Commonwealth Executive Steering Committee, the project managers, with the help of the team(s) impacted by the issue, will prepare a short paper describing the issue, its impact, potential resolution options and a recommended approach. If the issue is not hindering project progress significantly, the issue will be addressed during the next scheduled Commonwealth Steering Committee meeting. However, it may be necessary to seek guidance more urgently, in which case email or conference calls with members of the Commonwealth Steering Committee may be used instead.

### **Maintenance**

The Scope expansion/Contraction will be handled using the same Project Change Control Procedure as the Implementation Team.

## 4.5 Efficiency and Cost-Effectiveness

The vendor must define its approach/plan for assuring that it organizes and provides the proposed services in a cost effective manner, and the methods to be used to periodically review the plan and overall progress.

### The Commonwealth Partners' Response

#### Implementation

The Commonwealth Partners will use an Earned Value Management System (EVMS), which is an integrated cost and schedule performance management system used to manage and control government contractual efforts. The EVMS provides an integrated set of procedures and system components that support:

- estimating
- resource planning
- scheduling
- budgeting
- work authorizations
- cost accumulation
- work status and forecasting
- performance measurement
- cost and schedule variance analysis
- data analysis
- internal and external reporting

The EVMS will provide the Commonwealth Partners with a reliable, clear, and effective set of procedures and metrics to serve as a basis for decision-making and program control. Some of the specific objectives in using the EVMS are to:

- Provide overall visibility of cost and schedule performance
- Provide a focal point for reviewing program cost and schedule and comparing current and projected status with the baseline plan
- Plan all work scope for the program from start to completion
- Integrate program work scope, schedule, and cost objectives into a baseline plan against which accomplishments may be measured
- Objectively assess accomplishments at the work performance level
- Analyze significant variances from the plan and forecast impacts
- Provide data to higher levels of management for decision-making and implementation of management actions

Together, the tools provide an integrated system which meets the goals of integrated cost and schedule management. They provide insight into the control of cost, schedule, and technical baselines through the reporting and analysis of associated earned value metrics. The descriptions below describe the primary components of the EVMS, and explain the interaction of their roles within their environment.

### Rational Portfolio Manager Toolset

The Rational Portfolio Manager (RPM) toolset is a program management tool that will allow your project team to securely exchange information, track deadlines and assignments, solve problems, and discuss ideas-at any time, from any place through the convenience of a web browser. The Rational Portfolio Manager product delivers:

- **Portfolio Management** – high-end value for multiple projects as it provides an enterprise level of governance.
- **Standard Project Management** – the Microsoft Project (MSP) equivalent for Work Breakdown Structure and Gantt chart creation along with activity assignments to team members.
- **Reusable Methods** – with both Rational Unified Process templates and document templates, you have the ability to easily construct a project and guide all the team members through their efforts.
- **Risk Management** – capture and express information about the risk of the project or organization and explore mitigation opportunities.
- **Resource Management** – manage staffing profiles, capture and track the time and cost, schedule availability of all staff and assign staff to work efforts.
- **Other features** - project document management, project collaboration, and high-level requirement and change management requests for IT operations and governance.

RPM forms the core of the EVMS. RPM is a scaleable Work Breakdown Structure (WBS)-based system for managing the complete program management lifecycle. RPM is the primary repository of EVM data and is used to calculate EVM-related metrics. RPM generates an earned value model to measure program budget, performance, actual costs, and estimated costs to complete the effort. The program baseline budget is initially loaded into RPM. Thereafter, performance and actual data are loaded into RPM. The tool generates performance trends, statistical estimates at completion, and displays current progress to help predict future results. The following output is generated for management: internal reports, graphs, variance analysis reports, and customer reports as required.

### Maintenance

The Commonwealth Partners will incorporate best practices to optimize the application maintenance services the Commonwealth provides to its constituents. Below is a further description of the best practices used to achieve these benefits.

The as-is process for application maintenance results in a fragmented and sub-optimized use of maintenance processes and resources due to its decentralized nature. When multiple organizations perform the same activity in different ways, there is limited ability to gain economies of scale and efficiencies across the organization. In addition, there are dissimilar process standards that are not adhered to from a SEI CMMI perspective, therefore, there are no ways to effectively measure the efficiencies of the process. By consolidating application maintenance activities and processes, the Commonwealth is able to accurately monitor and measure the efficiency and effectiveness of their application maintenance organization.

The Commonwealth Partners' enterprise application services organization will implement the recently accepted Software Engineering Institute's Capability Maturity Model Integration (SEI CMMI®) System Engineering/Software (SE/SW) Staged framework – a framework that consists of best practices for enterprise application maintenance. The Commonwealth Partners will leverage its world-class project management and software development life cycle methodologies and its worldwide experience with successful implementations to achieve conformance with CMMI® Level 3 requirements at the Commonwealth. Industry-wide data demonstrates that implementing Level 3 compliant processes contributes to significant productivity and quality improvements, including reductions in the cost to find and fix defects, decreasing the time needed to complete tasks, increasing the predictability of meeting schedules, reducing the number of defects.

When embarking on the road to greater process maturity, a key challenge that application development and maintenance organizations face is balancing rapid implementation of process improvement goals with the ability of the organization to absorb change. The Commonwealth Partners' proven Transformation Methodology provides a streamlined, efficient approach, which enables successful process implementations with well planned strategies, to help the organization adjust to change.

The Commonwealth Partners will implement their step-by-step approach to process improvement at the Commonwealth. This approach consists of the following four phases - Plan, Prepare and Train, Implement and Institutionalize, and Appraise – as described below:

- **Plan**
  - The Commonwealth Partners perform an initial project review to identify constraints, set the scope of the organization and verify assumptions gathered before contract start.
  - The Commonwealth Partners develop a project charter and a detailed Microsoft Project schedule to implement Process Transformation.
  - The Commonwealth Partners enlist the project management office to establish the implementation of consistent processes across the Commonwealth, and a process-change management capability to drive the execution of the process improvement plan.
- **Prepare and Train**
  - The project management office, with assistance from experts in the Application Management Services Centers of Competency, reviews and makes minimum updates to the processes that are needed to satisfy the SEI CMMI® Level 3 requirements and to

implement the Commonwealth Partners Application Management Services Management System.

- The Commonwealth Partners train members of the application development and maintenance organization that are responsible for executing processes.
- **Implement and Institutionalize**
  - The project management office implements the procedures across the organization in a controlled manner to enable the practitioners to absorb changes and to have no impact on service levels for the Commonwealth's business.
  - The Commonwealth Partners collect evidence resulting from the execution of the improved processes. This practice demonstrates that the improved processes have been institutionalized into the organization's day-to-day operations.
- **Appraise**
  - The Commonwealth Partners team conducts periodic, planned checkpoint reviews to assess the progress of software process-improvement efforts. Commonwealth Partners Application Management Services Center of Competency will perform an independent evaluation of the account's training and quality management processes.

## 4.6 Change Management for People

The vendor must fully address the need for constant monitoring and management of change issues regarding staff, citizens, businesses, etc, and the methods they employ (to include appropriate and effective communications) to manage to a successful change event.

### The Commonwealth Partners' Response

#### Implementation

Enterprise Applications PPEA is a critical part of IT Transformation for the Commonwealth and will fundamentally transform how enterprise applications are selected, configured, implemented, used and supported. The impact of moving toward a Commonwealth-wide approach to managing enterprise applications is significant. Work will be more standardized, integrated and automated. New policies, and business processes will be created. Integrated and accurate data will enable data-driven decision-making. New interdependencies between state agencies and new state-vendor relationships will evolve traditional transactional processing and enterprise applications support. Jobs, skills and performance measurement will be affected. Over time, new system capabilities, services, business process improvements and IT solutions will be implemented.

The common thread throughout all of these changes is that they will all change how people do work across finance, supply chain, human resources, administration and applications support. Accordingly, in order to navigate this change successfully, the Commonwealth must plan and execute a comprehensive change management program.



State agencies will react to the prospect of integrated, centralized applications and support with varying degrees of receptivity. Some will see its benefits immediately, recognizing the opportunity to use a proven enterprise application and shed the administrative burden of technical service and support, enabling heightened mission focus.

*"Through 2005, more than 80% of failed technology implementations will be caused by people, processes, and politics, rather than by poor technology implementation"--  
Gartner Research*

Others will look at the change as a threat to mission, seeing integrated applications as a loss of autonomy and control over systems and staff that support core mission areas. For many agencies, the prospect of yet another perceived layer of central control over IT will be met with skepticism, notwithstanding the business benefits that will accrue to the Commonwealth.

Receptivity at the employee level will also vary. Some employees will see opportunity to grow in their careers and develop new skills. Others will perceive Enterprise Applications PPEA as an unnecessary change to existing systems or a threat to their retirement plans and benefits. In the meantime, employees must continue to perform effectively and managers must manage their employees throughout implementation. For these reasons, Enterprise Applications PPEA's success depends not only on the right technical solution and seamless implementation, but also on how the Commonwealth manages change and continuity. The Commonwealth Partners will provide a robust change management capability and a wealth of experience implementing large-scale enterprise applications solutions in state governments.

Beyond managing change for Enterprise Applications PPEA, the Commonwealth must thoroughly understand the implementation environment. Other IT projects that are part of the Commonwealth's overall IT Transformation as well as numerous Agency initiatives will necessitate rationalization of the objectives, priorities, benefits and timing of project activities that affect common stakeholders. Of particular importance is identifying integration points, dependencies and synergies between the Enterprise Applications PPEA and Enterprise Applications PPEA projects.

For Enterprise Applications PPEA, we will work with the Commonwealth to identify and address people-related risks; mobilize and align leaders; engage and communicate with stakeholders; prepare and equip the workforce; and, address the organizational implications associated with integrating enterprise applications.

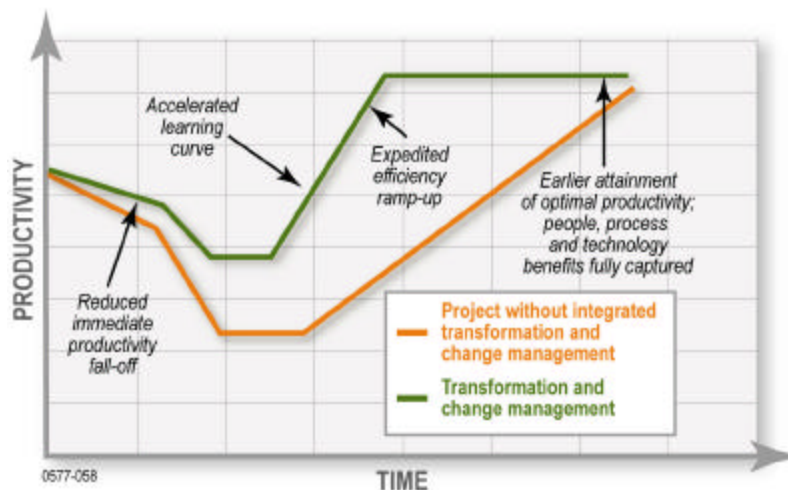
In doing so, we will help the Commonwealth realize tangible business benefits. Figure 4-5 illustrates how an integrated change management effort helps to limit the drop in productivity and expedite realization of business benefits while reducing the disruption such a major change brings.

#### Case Study: Commonwealth of Pennsylvania

The Commonwealth of Pennsylvania launched a large-scale business transformation and state-wide ERP implementation that deployed finance, budget, procurement, HR, and payroll functionality to over 50 agencies. The IBM/BearingPoint change management program was critical to building readiness for implementation. Highlights include:

- Designed and executed over 65 interactive events that built awareness and readiness among senior and mid-level leaders
- Developed comprehensive communications infrastructure that included electronic, print and promotional communications
- Launched Agency Implementation Teams that played an active role driving agency communications and supporting implementation tasks
- Worked with Workforce Transition Liaisons on the Implementation Teams to comprehensively plan for job responsibility changes for over 24,000 employees
- Conducted 60 events across the state to prepare managers and supervisors to talk to their employees about job changes and associated training
- Orchestrated and delivered a comprehensive instructor-led and web-based training curriculum to prepare and equip managers and employees to be successful

**Figure 4-5: Change Management Helps Expedite Realization of Benefits and Reduce the Disruptive Affect of Major Change**



We will draw on the Commonwealth's organizational knowledge and leadership commitment to inform and drive our approach. We, in turn, will provide our depth and breadth of experience managing large-scale transformations in order to equip the Commonwealth and guide implementation. As partners in Transformation, we are committed and excited to play a role in establishing the Commonwealth of Virginia as the leader in information technology management and a role model for business transformation.

## Outcome-Driven Change Management Approach

The Commonwealth Partners' approach to change management is action-oriented, outcome-driven and focused on helping the project achieve three specific objectives, shown in Table 4-3 below. Communications strategies, plans and activities are a key means of driving toward these outcomes and are embedded in our approach to achieving each objective. Arrayed against each objective are critical success factors that are indicators of successful achievement of the objective.

**Table 4-3: Outcome-Driven Change Management Approach**

Change Management Objectives	Critical Success Factors
Business Ownership & Leadership Alignment	<ul style="list-style-type: none"> <li>Leaders provide visible sponsorship, make timely decisions and drive accountability throughout the transformation</li> <li>The leadership team is aligned around a shared understanding of how the Commonwealth will operate and how IT services will be delivered</li> <li>Executive leaders through front line managers have a clear understand of their role throughout the transition, including what to start doing, what to continue doing and what to stop doing</li> </ul>
User Adoption	<ul style="list-style-type: none"> <li>All stakeholders (e.g., Leaders, managers, and employees; customers of IT services; oversight bodies, vendors, and others) whose processes, policies or systems will be changed during the transition have sufficient awareness, training and proficiency to execute before, during and following the transition</li> </ul>
Organizational Alignment	<ul style="list-style-type: none"> <li>Business, functional and agency jobs and /or organizational structures are aligned to improve the efficiencies of new processes, systems and services.</li> </ul>

Progress toward these outcomes is *measurable*, will be *monitored* and can be *adapted* to focus on the most critical areas of need as the overall project unfolds over time. Table 4-2 provides specifics on change management metrics.

Organizing change management around measurable outcomes provides the Commonwealth with a means to monitor and apply change management efforts to optimize organizational momentum building readiness for implementation.

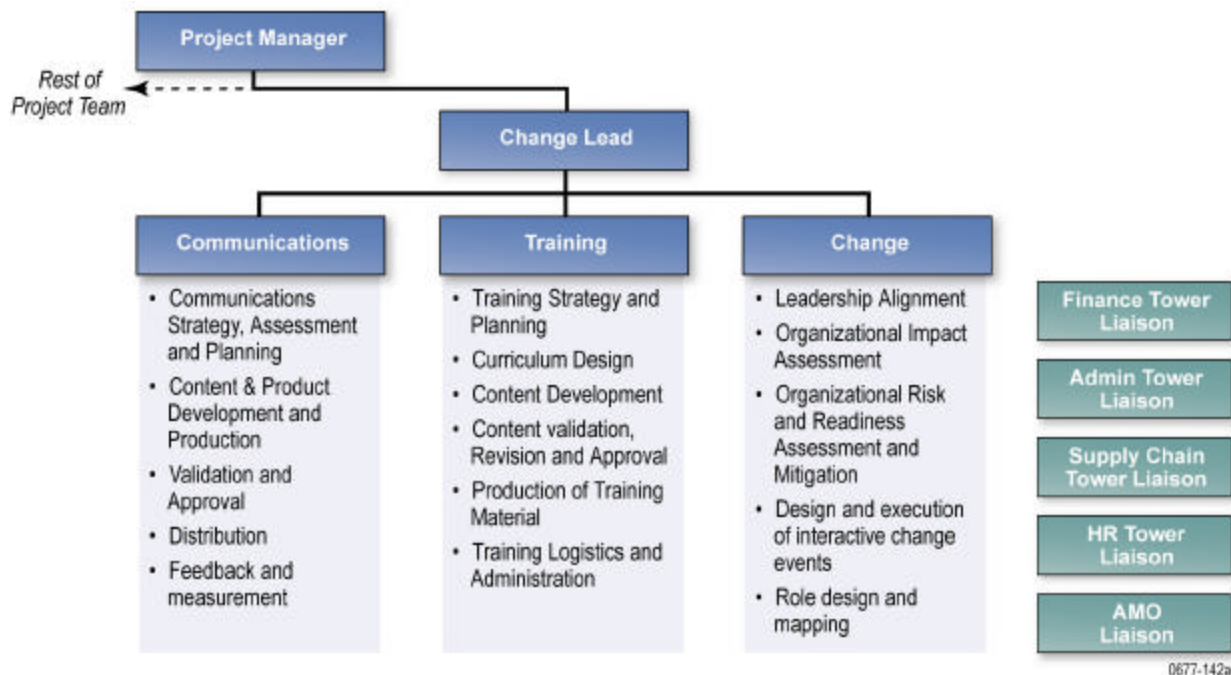
## Change Management Team Structure

Change management serves as an enabling and supporting function for project leadership and for each tower. As illustrated in Figure 4-5, the Change Lead reports directly to the project manager in order to facilitate integration and identify and resolve cross-tower issues and risks. The Change Management team has three primary areas of focus: communications, training and change management, each with specific areas of responsibility, also illustrated in Figure 4-6. Each of these areas not only drives consistency across the project and the organization but also identifies and addresses unique tower and agency needs and issues relating to communications, training and change management. In order to do this, our team will have staff dedicated to the tower teams and the PMO in order to provide adequate change, communications and training support and to provide a consistent point of contact for tower teams. Likewise, as enterprise applications is rolled-out to various agencies, these liaisons from the Change Management Team will support and interface with agencies. We envision establishing agency implementation teams

that would have dedicated change management support in addition to agency representation and support from the tower teams. Additionally, our change management team members will partner and coordinate with resources from the Commonwealth in each area of change management, including professionals from training and development, HR and the communications organization.<sup>1</sup>

The Change Management Team will operate in an agile and flexible manner, allocating resources to the points of critical need as implementation impacts different agencies and functional areas of the business. At first, we will focus change management support on the following key areas, in accordance with the Commonwealth Partners' overall implementation strategy: VDOT financial management and the Financial Management Tower; DOC warehouse management and the Supply Chain Management Tower; DHRM, e-recruiting and the HR Systems Tower; DGS facilities management and the Administrative Systems Tower; and, support of newly transitioned Commonwealth Partners' employees doing applications maintenance.

**Figure 4-6: Change Management Team Structure**



Importantly, change management activities will not be designed and executed in a “vacuum.” Rather, we will drive integration, coordination and timing of change management activities across other projects that impact the same stakeholders. This will maximize consistency and coordination of communications messaging and clarify impacts, while minimizing disruption

<sup>1</sup> The Commonwealth Partners will provide a full complement of change management resources and take responsibility for planning and execution of change management activities. At a minimum, we recommend that the Commonwealth dedicate a full-time communications resource to the project. This person’s role would be to be part of the communications team, helping with communications strategy, planning and content development and distribution. Another key part of this role would be to provide guidance and facilitation for validation, approval and distribution of communications content.

caused by uncoordinated meetings, and requests for participation of leaders, managers and employees.

## Enterprise-wide, Standardized Approach and Toolkit

The Commonwealth Partners have a robust repository of tools, templates, techniques and leading practices that will be implemented to help achieve the desired outcomes. We will work with the Commonwealth to select the best mix of tools from our repository in order to achieve the three change management objectives. Table 4-4 below provides an illustrative baseline Enterprise Applications PPEA Change Management Toolkit (tools are arrayed by notional project phase for each change management objective).

*“Without effectively allocating resources to change management, there’s little chance of achieving ROI on your enterprise software implementation.”—AMR Research*

**Table 4-4: Illustrative Change Management Toolkit**

Change Management Objectives	Define	Design/Build	Transition
Business Ownership & Leadership Alignment	<ul style="list-style-type: none"> <li>Executive workshop: Leading Thru Change</li> <li>Case for Change</li> <li>Journey Map</li> <li>Organizational Risk &amp; Readiness Assessment</li> <li>Leadership Communications Leadership Action Plans</li> <li>Leadership Commitment Assessment</li> <li>Leadership Strategy</li> </ul>	<ul style="list-style-type: none"> <li>Leadership Action Plan updates</li> <li>Transformation Awareness Events for front-line managers</li> <li>Updated Org Risk &amp; Readiness Assessment</li> <li>Ongoing Leadership Alignment Sessions</li> <li>Business Process Acceptance Session</li> </ul>	<ul style="list-style-type: none"> <li>Executive Capstone Working Session “Keeping Transformation Alive”</li> <li>Final Org Risk &amp; Readiness Assessment Recommendations</li> </ul>
User Adoption	<ul style="list-style-type: none"> <li>Project Team training on enabling systems and processes</li> <li>Awareness Events</li> <li>Town Halls</li> <li>Training Needs Assessment</li> <li>Training Strategy &amp; Approach</li> </ul>	<ul style="list-style-type: none"> <li>Workforce Impact Assessment</li> <li>Business Process Overview Events</li> <li>Process Validation Events</li> <li>Instructional Design</li> <li>Manager Prep Sessions</li> <li>Training schedules &amp; logistics</li> <li>Execution of training (with project teams)</li> <li>User Adoption Metrics</li> <li>User Adoption tracking &amp; reports</li> <li>Employee Action Plans</li> </ul>	<ul style="list-style-type: none"> <li>User Adoption Tracking &amp; Reports</li> <li>Adoption Risk Analysis and Recommendations</li> <li>Monitoring of User Adoption outputs</li> <li>Remedial, and ongoing training action plans</li> </ul>
Organizational Alignment	<ul style="list-style-type: none"> <li>Baseline Organizational Alignment Evaluation</li> <li>Baseline Competency</li> </ul>	<ul style="list-style-type: none"> <li>“Designing and Implementing Organizational Alignment Changes”</li> </ul>	<ul style="list-style-type: none"> <li>Revised job descriptions completed for retained org</li> </ul>



Change Management Objectives	Define	Design/Build	Transition
	Model Review	<ul style="list-style-type: none"> <li>Workshop</li> <li>Alignment of policies and procedures</li> <li>Hot Topic series for standing exec team meetings "Elements of Vendor Management"</li> </ul>	<ul style="list-style-type: none"> <li>Strawman Competency Model</li> </ul>
Relationship Management Support (PMO) <sup>2</sup>	<ul style="list-style-type: none"> <li>Project on-boarding project Change Management Boot Camp (for Commonwealth)</li> <li>Steering Committee presentation and report templates</li> <li>Decision-making and issue resolution processes for the project</li> <li>Project Team Roles &amp; Responsibilities</li> <li>Communication Strategy &amp; Plan</li> <li>Stakeholder Analysis</li> <li>History of Change/ Lessons Learned Exercise</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing project communications support within project team</li> <li>Ongoing project communications support for organization</li> <li>On demand development of Tower working sessions, meetings and/or events to address and mitigate emerging people and project risks</li> <li>Leadership Action Plans and coaching for project executives</li> <li>Ongoing Change Team development for client change resources</li> <li>Executive facilitation</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing project communications support within project team</li> <li>Ongoing project communications support for organization</li> <li>On demand development of working sessions and/or events to address and mitigate emerging people, and project risks</li> <li>Coaching for project executives</li> <li>Assessment of internal (client) change/ communications competencies &amp; recommended plan</li> </ul>

Once the baseline toolkit is selected, we will adopt and consistently apply it across the Commonwealth and the project team throughout the life of the project. The number of tools to achieve each objective is dependent on the phase of the initiative. Consistent toolkit use and change management delivery across the project generates momentum for change and supports Commonwealth change management resources in building lasting competency and experience.

#### Case Study: State of Florida

*The State of Florida is implementing a state-wide ERP-based financial system. The following are selected key elements of the change management toolkit that has been successfully deployed in support of implementation:*

- Case for Change
- Organizational Risk Assessment
- Agency
- Implementation Guidebook for agency implementation teams
- Knowledge Transfer Plans for State project team members
- Job and skill impact assessments and Organization Alignment Assessment
- Comprehensive instructor-led and web-based training curricula
- Training materials, including teachers, student manuals, quick reference guides and simulations
- End User support and help desk plan to support implementation
- Mapping of all end users to roles and curriculum

<sup>2</sup> The "Relationship Management" objective was added to the toolkit to illustrate the support and integration that the change management team will provide to the project team.



## Measure, Monitor & Adjust

Change management outcomes are linked to tools that support outcome attainment. Change management tools are linked to metrics that monitor effective use of the toolkit and gauge change management results.

Change management metrics are a combination of process and outcome metrics, respectively measuring the completion of core change management activities and the progress toward achieving the outcomes. These metrics, illustrated in Table 4-5 and arrayed by change management objective, will be developed and validated in conjunction with Enterprise Applications PPEA project leadership and the Commonwealth executives to determine appropriate quantity, frequency and depth of metrics. Team members will be trained on expectations and measurement requirements.

**Table 4-5: Change Management Metrics**

Change Management Objectives	Define	Design/Build	Transition
Business Ownership & Leadership Alignment	<ul style="list-style-type: none"> <li>100% of identified initiative sponsors and leaders complete readiness survey</li> <li>80% of sponsors and leaders have completed Leadership Action Plans</li> <li>60% of Leadership attend “Leading Thru Change”</li> <li>50% of Leaders rate 3.5 (out of 5) or better on Leadership Commitment survey</li> </ul>	<ul style="list-style-type: none"> <li>100% of sponsors and leaders have completed Leadership Action Plans or non compliance is escalated</li> <li>100% of leaders attend 2 or more sessions offered throughout the change project</li> <li>80% of Leaders rate 3.5 (out of 5) or better on Leadership Commitment survey</li> </ul>	<ul style="list-style-type: none"> <li>Leadership Action Plan checklists complete</li> <li>95% of leadership attends “keeping transformation alive” session</li> <li>90% of Leaders rate 3.5 (out of 5) or better on Leadership Commitment survey</li> <li>Leadership adopts its own “going forward” scorecard</li> </ul>
User Adoption	<ul style="list-style-type: none"> <li>100% of IT professionals have completed baseline skills assessment</li> <li>Baseline Training Strategy &amp; Approach – 100% complete</li> </ul>	<ul style="list-style-type: none"> <li>90% attendance rate for training for each tower/team</li> <li>User Adoption targets and acceptable progress</li> </ul>	<ul style="list-style-type: none"> <li>Business results targets and acceptable progress</li> </ul>
Organizational Alignment	<ul style="list-style-type: none"> <li>Baseline Organizational Alignment Evaluation 100% complete</li> </ul>	<ul style="list-style-type: none"> <li>Workshop Attendance Levels acceptable</li> </ul>	<ul style="list-style-type: none"> <li>Key decisions on Organizational Alignment recommendations made</li> <li>Employee satisfaction survey – acceptable levels</li> </ul>
Relationship Management Support	<ul style="list-style-type: none"> <li>100% adherence to PMO reporting and participation requests</li> </ul>	<ul style="list-style-type: none"> <li>100% adherence to PMO reporting and participation requests</li> </ul>	<ul style="list-style-type: none"> <li>100% adherence to PMO reporting and participation requests</li> </ul>

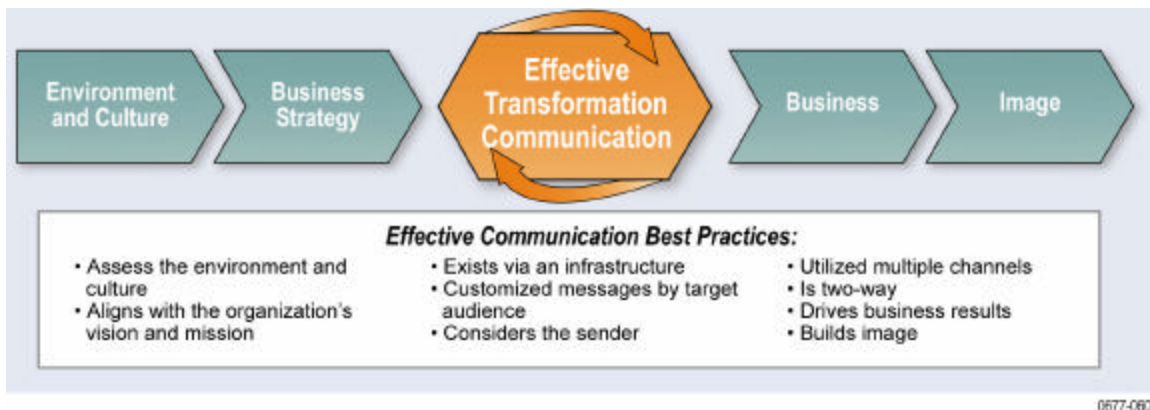
Once the baseline set of metrics is selected, it is adopted and applied consistently across change activities throughout the life of the project. Consistent application of process and outcome metrics set across the project allows the Commonwealth to gauge progress toward change management objectives as well as increases/decreases in momentum over the course of time.

## Communications

Communications is a critical element of our approach and is an integral part of achieving each change management objective. It is an accessible, cost effective and immediate lever that can help the Commonwealth engage employees, partners, citizens and other stakeholders of the project. We understand that the need exists across the Commonwealth for proactive, frequent communications as well as an employee preference for a targeted, “push” approach for content that involves executives and managers. We will work with the Commonwealth’s communications professionals to make this happen.

Our Strategic Communications approach, illustrated in Figure 4-7 above, will focus on using outreach to build awareness and readiness across the Commonwealth and within state agencies and will stress interactive events that provide forums for feedback. Our team will work closely with the towers teams, the PMO and communications professionals from the Commonwealth to promote integration of communications activities across the project and the organization. This approach will be scaled to meet the needs of the implementation plan. In executing this approach together, the Commonwealth Partners will help the Commonwealth to: build additional communication expertise throughout the organization, incorporate lessons-learned and leading practices in Transformation communications, and continue to build understanding and adoption of Enterprise Applications PPEA across stakeholder groups.

**Figure 4-7: The Commonwealth Partners’ Strategic Communication Approach**



Like the overall change management approach, our communications approach is outcome-focused. It consists of six phases of effort and is supported by a robust toolkit from which the Commonwealth and the Commonwealth Partners may select the most appropriate tools:

**Assess the Current State:** The current state assessment identifies the project’s and organization’s communication capabilities and builds the foundation of knowledge for subsequent communication activities. Key activities in this phase include a communications audit, stakeholder assessment and audience analysis.

**Create a Communications Strategy:** This is a high-level description of communication goals and objectives. This strategy aligns with organizational and project goals, roles and objectives, and prioritizes channels and vehicles in support of the strategic intent. The Communications Strategy also encompasses processes (e.g., approvals), protocols, channels, roles and support

resources needed to create and deploy effective communication. Key activities in this phase include establishing goals and objectives and identifying channels and vehicles.

**Identify Communications Infrastructure :** Communications infrastructure is the blueprint for the flow of communication. For Enterprise Applications PPEA, we will leverage existing communications channels, such as: Open Doors, Leadership Communiqués, newsletters, Town Halls, Dialogue Sessions, email, FAQs, and the Commonwealth's website. Key activities in this phase include mapping of two-way communication flow and identification of defining project and agency roles in driving communications.

**Develop Communications Plan:** The plan outlines the specific communication activities that will be implemented in alignment with the overall communication strategy. This plan covers the who, what, when, where, why and how of each communication activity. Key activities in this phase include development of a Communications Matrix and the Communications Plan

**Execute Communications :** In this phase, tactical communications are developed and disseminated, utilizing designated elements of the communication infrastructure and adhering to the overall strategy. Leadership action plans will contain communications activities and accountabilities as reinforcements in order to avoid this potential problem. Key activities in this phase include development, refinement, approval and distribution of communications products and messages.

**Monitor, Measure, and Adjust:** This phase provides the continuous improvement loop in the communication methodology. To promote effective communications, we monitor and adjust the communication plan, as well as measure overall effectiveness of the communication strategy. Key activities include development of communications metrics and the design, development and execution of focus groups and communications effectiveness surveys.

We will work with the Commonwealth to review existing tools, products and channels and determine the most appropriate depth and frequency for specific use on Enterprise Applications PPEA. We will refine, improve and scale our approach throughout implementation and beyond.

## **Maintenance**

The Commonwealth Partners intend to use their proven Transition Methodology to transition the employees and the maintenance work as smoothly as possible.

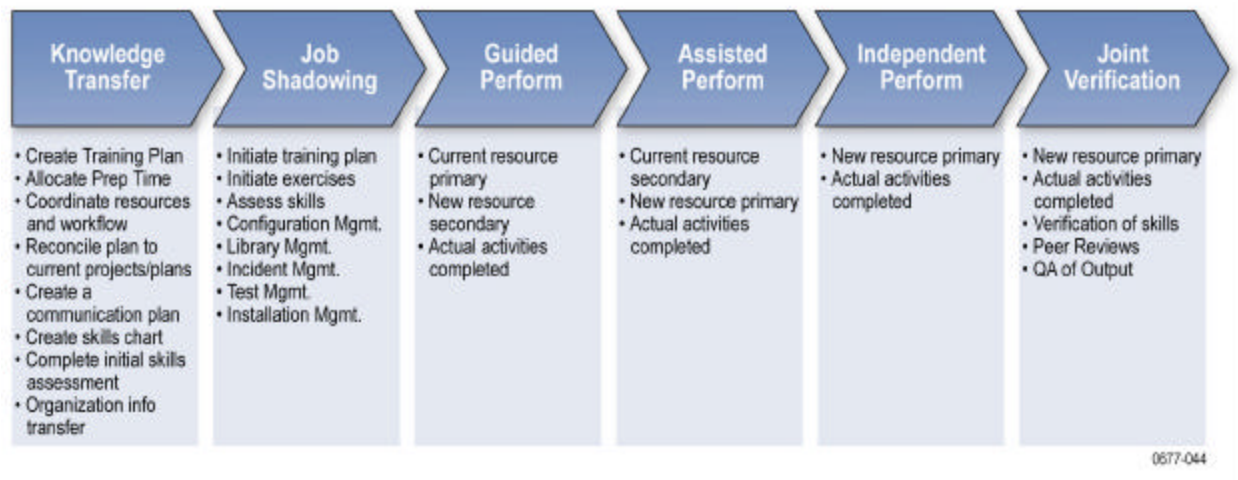
The objective of Transition is to move management of work from the Commonwealth to the Commonwealth Partners while maintaining a steady state of service delivery for all of the Commonwealth's business customers. The Transition is performed using the Commonwealth Partners' Application Management Organization (AMO) Transition and Transformation Methodology, which represents the accumulated best practices of the Commonwealth Partners in providing Transitions/Transformations in their many worldwide accounts over several years. The Commonwealth will benefit from this proven step-by-step approach which enables non-disruptive services and smooth transition of people and in-scope work.

Although most of the staff that will support the Commonwealth's applications will be transitioned from the Commonwealth, some will be new to the applications, necessitating that

knowledge transfer to the new Commonwealth Partners application maintenance services support staff will be a component of our transition.

Knowledge Transfer is central to the Commonwealth Partners Transition Methodology and a major risk mitigating factor to the transition of service. It is described here to demonstrate the Commonwealth Partners' understanding and experience with knowledge transfer. This is shown in Figure 4-8.

**Figure 4-8: Knowledge Transfer within the Commonwealth Partners Transition Methodology**



The steps of Knowledge transfer are:

#### Job Shadowing

During this step Commonwealth Partners' team members accompany the existing support staff as they perform their regular duties. This step is the starting point for one-on-one knowledge transfer, and provides the individuals with an opportunity to establish a relationship and allow the Commonwealth Partners' team member to gain an appreciation of the physical and technical environments.

#### Guided Perform

During the guided perform step, the existing support staff own the overall responsibility to solve any production problems that are identified. The Commonwealth Partners conduct joint problem analysis with the existing staff and participates in problem solving efforts under the guidance of the existing staff. This provides the individual Commonwealth Partners' team members with hands-on experience, addressing "real-life" problem situations.

#### Assisted Perform

During this step, the existing staff continues to own overall responsibility for problem resolution. The Commonwealth Partners' staff commences the handling of the initial call and provides problem resolution with the assistance from the existing staff. The existing staff ensures availability of key staff to provide secondary support to the Commonwealth Partners' team members, on a consultation/assistance basis.

### Independent Perform

The independent perform step provides an opportunity for the Commonwealths Partners' team member to perform the tasks without assistance from the existing staff. This has the added benefit in establishing early measurements that would feed the Service Levels program for ongoing purposes. The existing staff would be expected to maintain a skeletal team during this step to provide emergency support to the Commonwealth Partners' team members. Operational service level measurements are collected such as effort spent on various tasks, duration taken to resolve various types of defects, productivity of the team, variances from current level of service, and the number and frequency of tasks assigned to the team.

### Joint Verification

Joint Verification is meant as an audit step to confirm that the Commonwealth Partners' team members have achieved the necessary level of Knowledge Transfer to permit The Commonwealth Partners to assume ongoing delivery responsibility for the given application components.

When the transition is complete, the group of application maintenance employees will be organized along lines of technology skills in order to realize economies of scale. This will also allow for enhance career opportunity for transitioned employees through exposure to a wider variety of applications.

## 4.7 Partnership Priorities and Goals

The vendor must fully address the methods and approaches used to establish and manage priorities and goals attached to this partnership. This must include how to manage competing, colliding and changing priorities and goals.

### The Commonwealth Partners' Response

#### Implementation

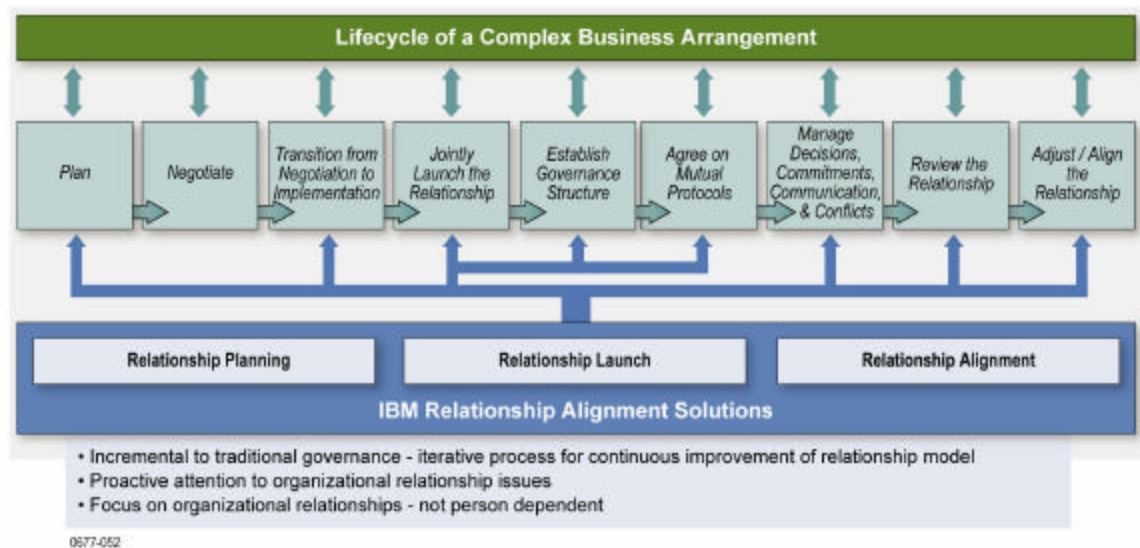
#### **Managing Priorities and Goals Through Effective Governance**

Governance is the combination of the people, organization structures, management guiding principles, operational procedures, commitments, meetings, metrics and reporting upon which the Commonwealth and the Commonwealth Partners will manage the proposed services sourcing relationship and value creation activities.

Effective governance is critical to maintaining agility and flexibility, aligning business requirements and IT priorities, and positioning emerging technologies as part of ongoing infrastructure evolution. When working with large, complex, long-term relationships, the governance model must facilitate the continued alignment of the delivery services with the Commonwealth's strategies and goals and also support the overall partnering relationship.



**Figure 4-9: Lifecycle of a Complex Business Arrangement**



### Governance Principles

By utilizing the Commonwealth Partners' relationship methodology, we expect the Commonwealth and the Commonwealth Partners to be able to proactively manage the overall relationship and our unique partnering relationship in a collaborative manner so that we can both enjoy:

- Aligned expectations
- Minimal gaps between perceived and delivered value
- Enhanced capabilities to manage the organizational relationship
- Effective organizational interactions
- Convergent management practices for the relationship
- Good communications at all levels
- Optimal business results

### Benefits of Governance

- The objective of this organizational relationship alignment capability is to:
- Build, enhance, and perpetuate long-term business relationships that sustain mutual growth and profitability
- Ongoing management of the Value Exchange
- Optimize value to both parties in the business relationship
- Enable the parties to work better together and leverage each other for optimal value
- Establish a framework for aligning behaviors, measurement systems and management systems
- Provide tools to manage the business relationship
- Reduce frictional cost (check the checkers)



## **Maintenance**

In order to facilitate the maintenance processes, the Commonwealth Partners will set up a 3-tiered operation. Tier 1 is the Commonwealth, Tier 2 is Commonwealth Partners' employees performing work at Commonwealth locations, and Tier 3 is Commonwealth Partners employees performing work at a Commonwealth Partners offsite location.

For managing the Commonwealth's enterprise applications services environment, the Commonwealth Partners will work with Commonwealth staff to establish operations management, planning, and control processes and procedures to meet the functional requirements. The Commonwealth Partners will work closely with the Commonwealth to adapt these processes and procedures to the Commonwealth's environment. The Commonwealth Partners' primary objective is to maintain a stable enterprise application portfolio environment while meeting or exceeding the required levels of service.

The Commonwealth's systems programming staff are an integral part of the overall process by providing the necessary support for the enterprise application operations environment. This systems programming staff evaluates, recommends, installs, and maintains all systems and application software. Their support includes upgrades to the software platforms, new product installations, releases, maintenance, and base customizations. The Commonwealth Partners' applications programming staff work with the Commonwealth's systems programming staff to communicate the effect and impact of system software changes and updates. The Commonwealth Partners will follow the Commonwealth's Change Approval Process prior to introducing a change into the integrated testing or production environment.

The Commonwealth Partners will, in the form and scope agreed upon by both parties, create and maintain operational documentation for the in-scope enterprise applications portfolio. This documentation consists of startup, backup, recovery and operational procedures. The Commonwealth Partners will update the operational documentation to reflect the changes made in applications and/or operating procedures as part of the implementation process.

The Commonwealth Partners will work with the Commonwealth to develop a set of operations reports that meet the functional requirements. As a starting point, the Commonwealth Partners will provide reporting structures that have been utilized with other clients and customize them to provide the appropriate reporting for the Commonwealth, including on-line reports and graphical representation. Metrics related to performance, utilization and status are collected throughout the delivery cycle and are available for reporting on a periodic basis

## **4.8 Conflict Management**

The vendor must fully describe the methods and approaches used to manage conflicts of any kind regarding contractual disagreements, any aspect of the proposed methodology, and any aspect of ongoing support.

## The Commonwealth Partners' Response

### Implementation

Enterprise Applications PPEA is a program that will have many different projects. Each individual project will have a project charter. The project charter will be created as one of the first steps in the project. This charter sets the ground rules for the operation of the project team and joining the team implies its acceptance. It is presented to the team at the beginning of the project, informally known as the “project kickoff.” It contains information about the shared performance objectives, expectations about team behavior, rules of engagement, key roles and responsibilities and other useful information.

The purpose of the project charter is to make sure that certain goals and operating procedures are shared by all the team members and understood by all team members. The lack of a team charter can inhibit a team from meeting its objectives, thus leading to a dysfunctional team characterized by undue conflict, mistrust, and lack of clear understanding about the project direction.

The project charter should contain the following five components:

- Identifying Information
  - Project Definition
  - Project Organization Chart
- Team Performance Objectives
  - Defines the team’s mission and overall objects
- Rules of Behavior
  - Behaviors
  - Timeliness
  - Respect
  - Commitment
  - Openness
  - Availability
- Rules of Engagement
  - Meeting protocols
  - Decision making
  - Discussion protocols
  - Support of agreements
  - Document control
  - Escalation Procedures
- Useful Information
  - Key Roles
  - Communication Management
  - Key Contact

## Maintenance

In any project it is inevitable that there will be situations where conflicts arise between team members that have the potential to delay the project. A formal procedure is incorporated in our Project Management Methodology to escalate conflicts in a timely manner to reduce the impact that these conflicts have on the project's schedule. A typical escalation process would include:

- **Level 1:** If the project team cannot resolve the conflict within three (3) working days, the Commonwealth's Project Manager and the Commonwealth Partners' Project Manager will meet to resolve the issue.
- **Level 2:** If the conflict is not resolved within five (5) working days after being escalated to Level 1, the Commonwealth's Executive Sponsor will meet with the Commonwealth Partners' Engagement Manager to resolve the issue.

During the Planning engagement the Commonwealth Partners' Project Manager and the Commonwealth's Project Manager will develop an escalation process for the project.

## 4.9 Understanding the Process (Business)

The vendor must fully address the techniques and approaches used to collaboratively arrive at complete sets of requirements for various initiatives. It is imperative to fully understand the business value and impact associated with an initiative prior to entertaining any step towards reengineering and re-solutioning business processes.

### The Commonwealth Partners' Response

#### Implementation

##### Requirements Capture Methodology

During the Define Phase of the each project, the project team will complete the activity "Initial Scope and Requirements." During this activity the business processes to be transformed and application modules to be implemented are:

- Validate and refine the new Commonwealth process framework
- Use the process framework to discuss and agree upon process scope.
- Map in-scope processes to application modules to determine package scope.
- Verify application scope with the Commonwealth team and key stakeholders.

##### Validating future business requirements

As a part of the Activity "Initial Scope and Requirements" defined above, the project team will validate the work done by the Commonwealth in the design of the new business processes and their fit with the delivered application functionality. Where gaps exist between the new business processes and the delivered functionality, the team will make recommendations to:

- Modify the new business process to conform with the delivered application functionality
- Modify application functionality to conform to the new business process.

- We recognize that the key to the success of each of the Commonwealth's project implementations will be the experience of the core project team. This team must include consultants with deep skills in implementing the defined application.

The Commonwealth Partners will assign individuals who have the skills and experience necessary to support a meaningful, long-term relationship with the Commonwealth and to obtain project success. We have assembled a team of highly qualified professionals who are technically experienced and knowledgeable in operations and system implementations.

### **Conference Room Pilot**

During the Design Phase we will build the "Conference Room Pilot" (CRP). This small scale functional environment provides the project team with the opportunity to implement Commonwealth specific functionality and demonstrate new process and procedures for future user and decision makers.

### **Detailed Gap Analysis**

The Detailed Gap Analysis is a series of documents that describe the analysis of the software applications in relation to the Commonwealth's future business processes. The purpose of the Detailed Gap Analysis is to document a detailed comparison between the package and the Commonwealth's future business processes and establish approaches for resolving the gaps between them. In general, a gap may be resolved in one of two ways:

- the application is modified to accommodate the business process
- the business process is modified to accommodate the application.

Future business processes will be designed with the applications in mind so that the business process will be modified where possible, rather than customizing the application. Security considerations should be included in this analysis.

### **Maintenance**

The organizational structure described in section 4.2 (Maintenance) explains the working relationship between the Commonwealth and the Commonwealth Partners for handling requirements.

## **4.10 Reengineering Techniques and Approaches**

The vendor must address how they propose business processes be evaluated, reengineered and tested/validated. This would include analytical methods and tools to be used to achieve the desired results.

### **The Commonwealth Partners' Response**

#### **Implementation**

The Commonwealth Partners fully expect to work hand in hand with the Commonwealth project team in completing all configuration and transaction processing systems to meet the knowledge transfer goals of Commonwealth. When the business processes and requirements for the system

are defined by the overall Enterprise Applications PPEA project team, the information must be translated into the new application. Some of the translating is completed using modifications, but the majority of the requirements and functionality will follow the Commonwealth's specific requirements through the appropriate settings of the configuration tables that control the application's functions. The Commonwealth Partners will configure the core system in four high-level steps that include identifying the configuration, defining the configuration design, validating the configuration, and configuring the application modules as described below:

### **Identifying the Configuration**

The initial step that the Commonwealth Partners will perform will be identifying the core tables that require configuring within each of the modules based. To aid in this process, the Commonwealth Partners will use proven checklists and designs created and validated during previous implementations performed by the Commonwealth Partners over the last several years. Once the required tables are fully defined, we will translate the Commonwealth's process designs and requirements into system configuration.

### **Defining the Configuration**

Once the Commonwealth Partners have identified the configuration requirements, we will complete design documents around each set of required tables. The Commonwealth Partners will provide proven standards for the configuration designs that have been used and refined on our prior and ongoing implementations as part of the Define Configuration segment of our methodology. These designs include standard factors to consider in making configuration decisions, industry best practices for individual tables, and technical table requirements. The Commonwealth Partners will complete these design documents per the requirements of the Commonwealth. The design documents will contain the approach used for each of the tables, the interaction of that table with other major application tables, and the ability to track issues that affect the design of the tables. Accompanying the design document will be a spreadsheet that has the data element requirements for the specific table, i.e. the specific table column name, whether it is numeric or alpha data, its maximum length, etc. This spreadsheet template will then be populated with the actual configuration values. The Enterprise Applications PPEA project team will define the values to verify that they meet the requirements of both the Commonwealth's business and the application.

### **Validating the Configuration Design**

The Enterprise Applications PPEA project team will check to validate that the overall design is in line with expectations, that the designs for related table sets will work together properly, and that the deliverables created are up to the required standards for completeness and detail that will allow them to be used to load the tables in the system.

During this phase, members of the application design team will be able to setup samples of their tables and test its settings to confirm that their planned use of the configuration will meet the requirements that were outlined. The configuration design documents will be reviewed with application experts, as well as, the Commonwealth business process owners on the project. Many times during this phase, particularly for especially critical tables, the project team may leverage

additional Commonwealth Partners configuration experienced resources who are not a part of the Enterprise Applications PPEA project team to conduct a Quality Assurance review and report back to the Configuration Team manager on their findings and recommendations.

### **Configuring the Application Modules**

Once the designs have been reviewed and signed off by both project application supervisors and Commonwealth business owners, the actual table values will be entered into the system. There are two general ways to get the configuration values loaded into the system:

- **Manually** – For tables that have only a few rows of data to be loaded, we will enter them manually, directly through the application pages. This is the most efficient way to load smaller tables. Also, by entering tables through the application all of the on-line edits are triggered, providing valid data.
- **Automatically** – For tables that have many rows of values that need to be loaded, we will utilize load scripts to populate the data. At IBM, we have built load scripts for most configuration tables and will bring them to you as a project tool. These scripts will use as their inputs the spreadsheets that were created and populated during the design phase. The spreadsheets make the configuration effort more efficient, as some tables may contain hundreds of rows of data, and many of the columns can be copied from other rows.

In addition to the design and table standards described, the Commonwealth Partners will provide utilities and guidelines to assist in the overall loading of the configuration values and the management of the values between environments. The Commonwealth Partners have refined listings to indicate the order that configuration tables should be loaded into the system, based on table relationships and application edits.

### **Application Modification**

The Commonwealth Partners take a structured approach to modifications to the application. Modifications are changes or additions to the delivered vanilla software package that provide the functionality to support the Commonwealth's business processes. Modifications can take the form of new or changed programs, scripts, or data files.

#### **Modification Development Approach**

The modifications that are created should be based on approved specifications defining the operations of the intended application. They should use approved standards and procedures, such as coding standards and build procedures.

Standard extensions such as plug-ins may already exist for a program. They should be treated like those that require development and should be tested in conjunction with the client's application as a whole.

#### **Modification Validation and Verification**

Validation and verification activities should involve representatives from the whole project team to ensure a common understanding of the purpose and operation of the modifications.



Modifications are validated through code inspections based on the following criteria:

- The code must agree with the specifications
- The coding rules, standards, and procedures must have been observed
- The normal exception and error conditions must be processed correctly, including appropriate messages that are meaningful to the end user
- The implementation must conform to the security requirements

The code must accurately reflect specification changes that result from the project's change management mechanisms. It should also be traceable back to specific requirement statements that should likewise be under change control.

Verification of the package extensions is not left to unit testing. Source code is verified in ways such as:

- Syntax checking
- Code reviews and walkthroughs
- Mechanical verification of types and signatures that can detect errors early in the coding process
- More formal methods, such as pre- and post-conditions and invariance, have a high payback, but come at a substantial cost in complexity and comprehensibility
- Probabilistic and white box analyses that can be used to focus testing on critical parts of the system
- Black box testing used to test the code against the design and the requirements but is the least effective form of verification
- Testing the error handling mechanisms, performance, and security features

## Testing Methodology

Testing is the cornerstone of a successful implementation. Each individual project will have a high-level testing strategy defined in the Statement of Work. The following Table 4-6 lists the different types of testing activities that could be used in the individual test plan.

**Table 4-6: Testing Activities Descriptions**

Test	Test Description
<b>Unit</b>	Unit Testing is a test that is performed by the programmer to validate the basic technical and functional foundation of the program. It includes testing of business process logic only to the extent specified in the design specification. The programmer tests the program to the extent possible; given his/her knowledge based on the design specifications.
<b>String</b>	String Testing is performed by a separate string testing team typically comprised of primarily functional (with some technical as well) team members, this tests for errors caused by linked units of a system instead of solely those found within each unit.
<b>System</b>	An independent examination of stand-alone programs and called modules . This phase provides a verification that the upgraded application, as a whole, properly carries out all designed business functions . The data and transaction volumes are held to modest levels to help keep the verification / reconciliation process manageable and efficient.
<b>Integration</b>	The purpose of Integration Testing is to test that the system works as designed from end-to-

Test	Test Description
	end. The environment for system test should be identical (or as close as possible) to the final production environment. This way the testing can mimic the real-life results of the system upon go-live. This includes high-volume testing in order to test that the system meets the required level of performance with respect to throughput, delay and simultaneous transactions in a simulated production environment. During system test, business events and processes are tested across application boundaries and across technology platforms. During system testing, we also use testing tools to generate high volumes of transactional data for stress testing.
<b>Stress</b>	This phase provides for system components to be thoroughly tested with high volume workloads to determine acceptability of overall throughput, response time, run time, data storage, and resource utilization.
<b>User Acceptance</b>	User Acceptance Testing is performed to confirm that the system's performance is acceptable to the client. At the beginning of the Test Phase, user acceptance test criteria are defined. This is where the thresholds are defined for the users to accept the system. For example, the acceptance criteria for a complex query would be that the results are returned within 3 minutes of submitting the query. During user acceptance testing, complex queries are run and timed. To successfully complete the User Acceptance Test, the users must accept the results of the testing.

The PMO team selects appropriate tools to be used in various phase of testing. Table 4-7 below is the representative list of tools and their purpose in testing:

**Table 4-7: Representative Tools and Their Testing Purpose**

Testing Activity	Testing Tool
Requirements Tracking	Microsoft Excel, Word, <i>[Any BPR Tool]</i>
Test Management	Microsoft Project
Master & Detailed Test Plans	Microsoft Excel, Word
Test scenarios, Test scripts	Microsoft Excel, Word, Test Director
Test scheduling/resource allocation	Microsoft Excel, Project
Defect Tracking	Microsoft Excel, Word, Test Director Access
Metrics	Microsoft Excel, Word
Test Reporting	Microsoft Excel, Word, Test Director
Load Testing	Rational Performance Tester
Regression Testing	Rational Robot

## Maintenance

Within the maintenance environment there will not be any business process changes required.

## 4.11 Re-solutioning Techniques and Approaches

The vendor must address how to approach identifying solution alternatives, how to evaluate their feasibility (to include the ability to evolve with changes in business conditions and requirements, fit with the current solution environment, performance/capacity constraints, etc).

## The Commonwealth Partners' Response

### Implementation

#### Detailed Gap Analysis

The Detailed Gap Analysis is a series of documents that describe the analysis of the software applications in relation to Commonwealth's future business processes. The purpose of the Detailed Gap Analysis is to document a detailed comparison between the package and

Commonwealth's future business processes and establish approaches for resolving the gaps between them. In general, a gap may be resolved in one of two ways:

- the application is modified to accommodate the business process
- the business process is modified to accommodate the application

Future business processes will be designed with the applications in mind so that the business process will be modified where possible, rather than customizing the application. Security considerations should be included in this analysis.

#### **Development of Detailed Gap Analysis**

The following steps will be used in workshops and conference room pilot(s) to develop the Detailed Fit Gap Analysis:

- Review each application module in light of future business processes and business requirements; identify gaps
- Develop options for resolving the gaps
- Estimate effort to implement options
- Develop implications (risk analysis) of implementing options
- Select approaches based on options selected
- Document the analysis and approaches

The analysis highlights the gaps where business processes and requirements are not fully supported by the package. Changes to the process or to the package are proposed. The implications of the change are also documented, including:

- Schedule impact
- Implementation cost
- Fit with the project's overall implementation strategy

Once the decision has been made that a customization is necessary the IBM consultant will develop a functional specifications (requirements) document and provide it to the technical team.

Without a Detailed Gap Analysis, the extent of business-critical "gaps" will not be known from the beginning, but rather will be uncovered over time. Early identification of gaps and consideration of alternatives provide a degree of proactive control over the configuration process.

#### **Maintenance**

There will not be any re-solutioning required in the maintenance environment.

### **4.12 Risk Assessment and Mitigation**

The vendor must address how to identify risks associated with change events (staff, process, technical or otherwise) and what mitigation methods and techniques have been used successfully in the past.

## The Commonwealth Partners' Response

### Implementation

#### Understanding the Risks

Projects of this size, scale, and complexity carry inherent risks which resonate in every aspect. To understand the overall risks and to craft an overall solution that minimizes risk and enables the Commonwealth Partners to manage the remaining risks is our goal.

#### Addressing the Risks

The Commonwealth Partners embrace the concept of continuous risk management as defined by the Software Engineering Institute (SEI). Continuous risk management provides a disciplined environment for proactive decision making to:

- Continuously assess what can go wrong (risks)
- Determine which risks are important to manage
- Define and implement strategies and plans to mitigate the risks and that they do not impact program delivery.

The Commonwealth Partners' risk management process will provide the Enterprise Applications PPEA team with concise visibility to the program execution risk factors. Risk management is important to both the Commonwealth and Commonwealth Partners as a part of the overall program management effort to:

- Eliminate surprises to the program and plan ahead for issues that are identified as having high probability of affecting program costs, schedule and/or performance.
- Evaluate trade-offs and make decisions
- Maintain control of a large, complex program that is critical to the future operations and service delivery
- Achieve transformation goals and business imperatives identified by the Commonwealth.

During the project, we will work with the Commonwealth Project team to put into place the risk management foundation necessary to provide the capabilities and management framework needed as the Enterprise Applications PPEA effort continues.

#### Risk Management Background

The Commonwealth Partners recognize the importance of strong project and risk management to deliver on-time and within budget while meeting your requirements and expectations of service. Risk Management begins with a clear articulation of program vision and goals, the formation of a strong team, and the development of a program management plan that prioritises project activities and accounts for the full range of contract requirements. The Risk Management plan provides the basis for the identification and ranking of risks likely to impact program achievement.

The Commonwealth Partners will provide strong and consistent project/team management and risk management for this project.

### **Overarching Risk Management Strategy**

Commonwealth Partners' overarching Risk Management Strategy is based on four key facets.

1. Our Team includes personnel with the specific capabilities and experience to enable the Enterprise Applications PPEA Program to meet the Program goals.
2. We will leverage our combined experience and capabilities to design a flexible risk management solution using tested and proven strategies, methods and concepts.
3. We will rigorously apply our established and integrated management processes to identify, classify and mitigate risks. Our management process vigilantly monitors for both anticipated and unanticipated risks to goal realization well in advance of their potential negative impact on the project.
4. We will establish a close working relationship with the Commonwealth that fosters open communication across all levels of the organization. In this manner, through joint cooperation and coordination, we can enable the early identification of risks and the development and adaptation of mitigation strategies that satisfy stakeholders' interests.

### **Managing the Risks**

#### **Program Executive**

Working from the risk management plan, the Program Executive will interact with the Program Manager and each Project Manager to identify and classify potential risks. The result of this process is a risk set that is more specific in nature than the "high" level program risks provided in the attachment. Each of these specific risks will be judged on potential impacts.

Risks are identified, analyzed and managed at all levels within the Enterprise Applications PPEA organization and are addressed according to the governance model. Risks at the "high" level tend to be more global and deal with the overall project while "medium" and "low" level risks tend to be less expansive or less likely. Regardless of risk level, each risk must be addressed by the appropriate level(s) of project management. As new risks are identified, comprehensive strategies and plans to deal with them at the proper project level/unit(s) are developed and deployed.

Because risk management is a continuous process that requires involvement from both the Commonwealth Partners and the Commonwealth, a regular process for risk review that is best suited for the Enterprise Applications PPEA Program will be established. The suggested risk management process flow, showing the interaction with the PMO, has been successfully used on other programs.

The Program Executive will develop the overarching Risk Management Plan that highlights the specific Enterprise Applications PPEA Program risk management processes, methods and tools for use on the project. This overarching plan will include roles and responsibilities and risk management activities necessary for managing risk. The Risk Management Plan will determine

risk management metrics to be collected and analyzed to provide the Program Executive with useful information to be used in tracking and controlling the phases of the risk management process.

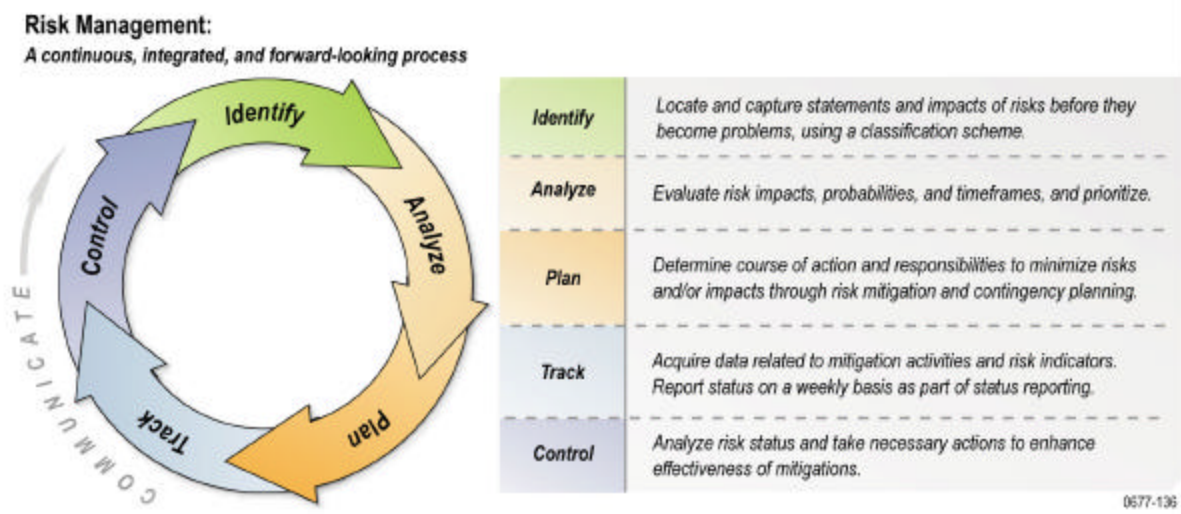
The purpose of the risk management plan is to:

1. Describe the Enterprise Applications PPEA Program Risk Management Organization and its roles and responsibilities
2. Establish Risk Management within the PMO structure and identify members, meeting schedules and operating procedures and processes tailored to the Enterprise Applications PPEA Program that are integrated into the project plan and schedule.
3. Establish the overall risk structure and risk area owners within each project.
4. Integrate risk management into the program management process for this program and allow for early identification and avoidance of risk
5. Integrate stakeholders into the program risk management processes

### Risk Plan Execution

Risk management begins with an analysis of the project situational factors to determine the conditions or factors that could cause potential problems on the project. During the proposal process, the Commonwealth Partners identified and assessed risks in terms of Probability of occurrence and Impact severity. For each of the identified risks, mitigation plans have been proposed to deal with them. As the identified risks arise in the project timeframe, the mitigation plans are executed. Risk management comprises the five basic steps as shown in the following Figure 4-10.

**Figure 4-10: Risk Management Process Overview**



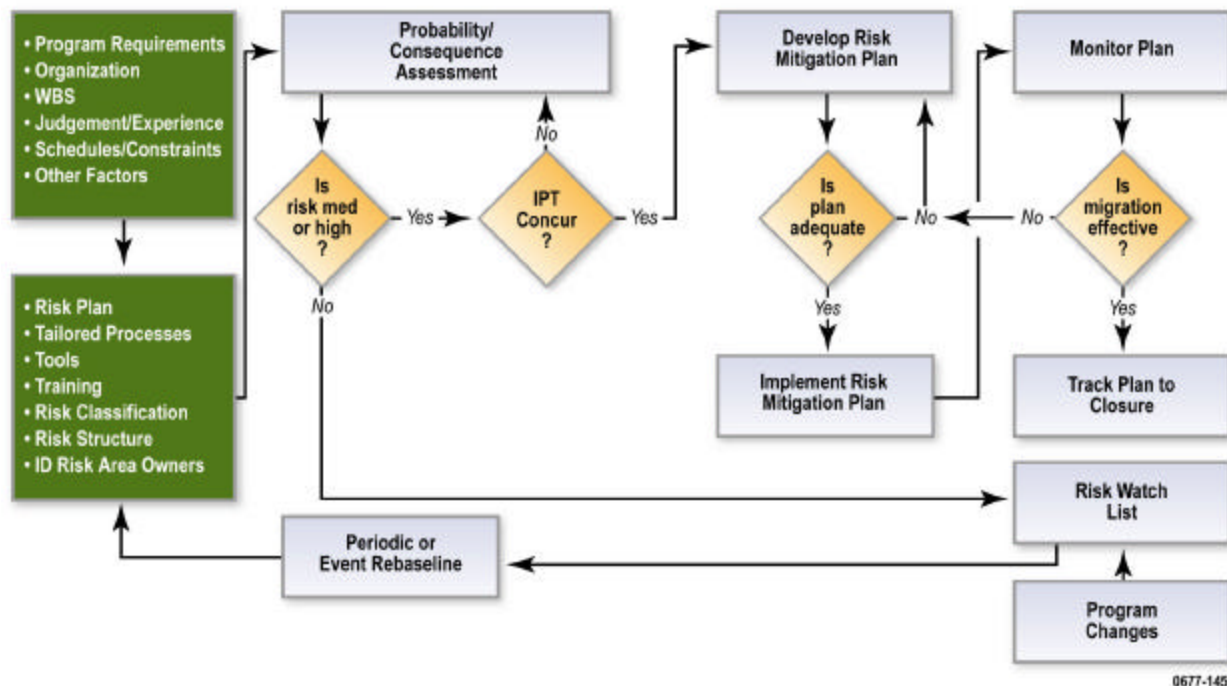
In determining which risks warrant our attention in the Enterprise Applications PPEA Program, we have a rigorous process of identification and classification drawing on the experience of our team members.



During the project, we will work with the Commonwealth to develop a joint risk management plan that will provide the guidance, process and structure specific to the Enterprise Applications PPEA Program. Risks are monitored and managed through the PMO organizational structure. From a project management perspective, it is important to understand the potential risk factors and their consequences on program performance, cost or schedule as the project commences.

## Risk Management Organization

Figure 4-11: Risk Management Process Flow



As specific risks are identified, formal risk mitigation plans are developed for those risk items that result in an assessed rating of Medium or High by the appropriate combinations of PMO risk and technical staff. Strategies are developed to mitigate risk using the proposed approach and this is integrated with our management and technical approach. Additionally, risks are reviewed for interdependency with other risks and how they may affect individual or multiple contract requirements. Additionally, a risk item may be applicable to more than one risk area, but the impact of the risk item may be different.

A formal mitigation plan will detail risk impacts, risk mitigation approaches and workarounds for those risks that are not anticipated to be completely mitigated through standard practices, processes, and strategies either by the Commonwealth or the Commonwealth Partners. Tools such as risk waterfall charts will be used to track and monitor progress. The Program Executive will review and coordinate mitigation plans across the PMO structure with all affected teams. For each mitigation plan implemented, an assessment is performed to identify any new risks that may be created due to the implementation of workarounds or contingencies.

## **Risks Identified**

After thoroughly understanding the project requirements, our team, led by the Program Manager, assessed the risk rating for each risk area and risk item. For the Enterprise Applications PPEA effort, this rating was determined through discussion and consensus with risk area owners and subject matter experts within our team. Each risk area owner evaluates each risk and recommends to the project team an approach to mitigating the risk to the lowest level possible.

The risk ratings reflect the fact that the Enterprise Applications PPEA is a complex program that spans many years, involves many stakeholders, and requires significant cross-coordination between many organizations in order to be successful. Some of the risks identified are outside the immediate control of the Enterprise Applications PPEA Program. However, IBM recognizes that these issues require a sound management approach to influence, respond to and ultimately mitigate program risks.

## **Risk Impacts and Mitigation Strategies**

Risks identified as Low are placed on a risk watch list, monitored and reassessed to ensure they do not become a Medium or High risk. Part of our continuous risk management processes is to re-baseline the risk plan based upon periodic reviews or program changes. As functional and integrating work progresses, new risks are identified and assessed.

## **Additional Risks from Mitigation Activities**

As mitigation approaches to risks are implemented, additional risks can be introduced. These new risks are handled through the risk process. When mitigation plans are implemented, sometimes it is prudent to pursue the highest priority strategy and alternate strategies concurrently. This approach may minimize performance risk, but create additional risk to cost or schedule due to resources required to implement each strategy.

For the initial risks identified for the proposal and shown above, we do not anticipate any new risks would be created during the project from mitigation activities. However, as the project progresses and details of the overarching plan and business unit planning become better defined through interaction with the Commonwealth, the Commonwealth Partners will establish appropriate mitigation strategies for all identified risks.

The Program Executive will perform this function by continuously evaluating the project for risk, manage the existing risk plan proactively, and developing mitigation plans or contingencies for the risks identified.

## Risk Assessment and Mitigation for Change Management

Addressing the people-related risks that could impact successful implementation is one of the most important risks to identify and manage. Standardizing processes and systems in a highly distributed organization, the Commonwealth will need to identify and address the people-related risks that could impact successful implementation. Table 4-8 below provides a preliminary view of potential people-related risks we developed based on our work with the Commonwealth as well as information gathered during due diligence. Arrayed against each potential risk are the implications of those risks and sample mitigating actions that can be developed from our change management toolkit.

30-40% of global ERP implementations fail or are sub optimized. People-related risks are the most significant contributor—Gartner Group

**Table 4-8: Preliminary Organizational Risk Assessment**

Potential Risk	Implications	Example Mitigating Actions
Implementing new systems and processes across previously independent and culturally diverse agencies, some of which have previously deployed and customized a different ERP system	<p>Leaders and managers do not make a case for change and are not willing or prepared to lead change</p> <p>User acceptance is low due to loss/change in system functionality or frustration with having to learn a new application</p> <p>Retention of key managers &amp; employees drops</p>	<p>Development of a communication strategy for common understanding. Leadership Strategy to build a common vision, establish decision-making processes and drive leader involvement.</p> <p>Communication Plan and outreach to build awareness. Business Process Overview and Process Validation Events to build acceptance. Organization Alignment Assessment to align incentives and rewards. Training Strategy and deployment to prepare and equip the workforce.</p>
Balancing agency business needs and desires with the need for enterprise standards	<p>Previously independent agencies perceive a loss of autonomy, control, and application functionality and support</p> <p>The perception that the project does not understand the business needs of other agencies</p> <p>The perception that agencies are not willing to move to standard enterprise systems and processes in order to achieve business benefits</p>	<p>Readiness Assessments, interviews and agency implementation teams to build understanding of agency issues and risks.</p> <p>Leadership Action Plans to promote understanding of business case, leadership communications and governance guidelines.</p>
Inadequate identification and planning for organizational and individual competencies critical to success in the new environment	Key competencies are not developed in time, hampering realization of business benefits (e.g. vendor management, customer relationship management, IT investment management, change management)	Organizational Alignment and Competency Model Assessments and Recommendations to build needed competencies that support implementation timelines.
Multiple initiatives and continuing operations stretching resources at all levels	<p>Unclear priorities and decreased productivity</p> <p>Projects activities are not integrated effectively leading to uncoordinated and ineffective deployment of new systems and processes.</p>	Facilitation and integration of organizational design and job design efforts. Readiness assessments to track key readiness areas throughout deployment.
Building system acceptance and process discipline in order to achieve tax and operational benefits	<p>Political pressure promotes a "wait and see" approach among the workforce</p> <p>Benefits are sub-optimized or not achievable due to lack of leader alignment and management involvement</p>	<p>Comprehensive, promotional communications products and events</p> <p>Manager Prep Sessions to prepare managers to lead the transition of the workforce. Employee Action Plans to prepare employees. Focused end user training to maximize understanding of the system and processes within the business context.</p>

Our approach to Change Management for People, discussed in Section 4.6 above, will focus on validating these potential risks and identifying other in order to quickly develop and implement mitigation plans.

### **Maintenance**

The major risk associated with the Commonwealth Partners assuming responsibility for enterprise application maintenance for the Commonwealth is whether the Commonwealth can absorb the amount of change required to achieve the goals set forth by the Commonwealth Partners. This risk is significantly mitigated by employing the formal change management processes set out in previous sections.

Specifically, since the assumption of application maintenance includes the transition of employees from the Commonwealth to the Commonwealth Partners, cultural transformation is the most applicable for discussion here as the most significant risk.

Cultural transformation will occur immediately upon beginning service. During this phase the transition team will focus on the cultural change activities related to people. These activities will assimilate newly acquired staff into the Commonwealth Partners. As part of this phase the Commonwealth Partners will introduce the new employees to the Commonwealth Partners' HR-related processes and procedures, using multiple media to ease the assimilation of the new staff into the Commonwealth Partners culture. The transition team assists in implementing the Commonwealth Partners' Professional Development (PD) program to establish performance plans, skill assessments and career development plans for each new Commonwealth Partners employee. Presentations to the new team cover topics such as an overview of the contract, an introduction to transition and service delivery, and business objectives.

By accounting for cultural transformation using a proven methodology, the Commonwealth Partners will enable a smooth transition from the Commonwealth enterprise application maintenance organization structure to the new Commonwealth Partners delivery organization, without impacting the Commonwealth's business.

## **4.13 Implementation Planning Techniques**

The vendor must show the skills, abilities and toolsets it brings to the table that enable it to successfully manage to completion projects of all sizes in terms of business impact, cost and duration.

### **The Commonwealth Partners' Response**

#### **Implementation**

The Commonwealth Partners will use IBM's world-wide project management methodology (WWPMM) as the program management methodology to structure the day-to-day management activities of the Enterprise Applications PPEA Program. WWPMM provides the foundation for project communication, status reporting, work plan updates, risk mitigation, action item and issue tracking, as well as deliverable tracking and change control. This method is based on the Project Management Institute's internationally recognized framework, the Project Management

Body of Knowledge (PMBOK®). The resulting method, deployed for corporate wide application and used by the 16,000 project managers in IBM, represents the result of this research filtered through the successful delivery of thousands of IT projects.

This methodology will be used at the Commonwealth to facilitate the sharing of project management knowledge and experience, improves identification and usage of practices, and improves project results through avoidance of common pitfalls. The methodology also provides a web-based set of tools, processes, and procedures that will assist project teams and the PMO in the successful management of the engagement. This method will also allow the project teams for the Commonwealth's program to:

- Improve team effectiveness and efficiency
- Manage project planning and control functions
- Mitigate project risk

The Commonwealth will benefit directly from IBM's established techniques and tools for project planning, tracking, reporting, and management. We will leverage our experience gained from managing other state and local government as well as private sector implementations and integration efforts and other large-scale organizational change projects.

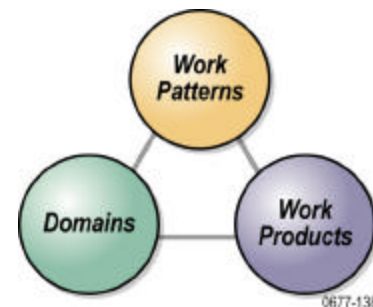
### Methodology Organization

IBM's project management method organizes the project management approach and method around domains (knowledge areas), work patterns (processes) and work products (deliverables and results) as pictured in Figure 4-11.

### Project Management Domains

- **Change Management:** includes the processes required to adapt to the foreseen and unforeseen changes that inevitably arise during the course of a project and may jeopardize cost, revenue, quality, or deadlines. The effective management of change is a critical factor in the success of a project.
- **Communications Management:** includes planning and delivering information related to the project to project stakeholders. Includes the processes required to address timely and appropriate collection, generation, dissemination, storage, and disposition of project information. It defines the critical links among people, ideas, and information that are necessary for success.
- **Deliverables Management:** includes managing the life cycle of deliverables from definition through acceptance.
- **Event Management:** includes the processes necessary to collect project issues and monitor their resolution, analyze symptoms that are causing concern about a particular project situation and handle actions.

Figure 4-11: Organization of IBM Project Management Method



- **Human Resource Management:** includes the processes required to coordinate the human resources on a project. Such processes include those needed to plan, obtain, orient, assign, and release staff over the life of the project.
- **Project Definition:** contains the processes for transforming a business need into a clearly defined strategy for providing a solution that meets the business need.
- **Quality Management:** includes the processes required to help the project satisfy the needs for which it was undertaken. It addresses quality from the perspective of both the management of the project and the products and services that are to be produced.
- **Risk Management:** includes those processes that identify, analyze, and respond to risk throughout the life of a project.
- **Sponsor Agreement Management:** includes processes to develop the Agreement with the sponsor, use the Agreement to support the management of the project, negotiate changes to the Agreement during the course of the project, and close the Agreement at the end of the project.
- **Supplier Management:** includes processes to identify and select a supplier; create, maintain, and terminate the formal agreement with a subcontractor; enable a subcontractor to start work; review the progress that a subcontractor is making and the quality of the work being performed; and evaluate the performance of a supplier after the goods or services have been delivered.
- **Tracking and Control:** includes the processes required to collect and validate progress and financial data, analyze whether or not the project is proceeding according to the Agreement and project management plans, and adjust the project management plans as needed.
- **Technical Environment Management:** includes the processes required to plan and start, or to customize, the technical environment; monitor that it provides the expected service throughout the project; and then uninstall it, if necessary. Defining the requirements for, estimating the costs of, and tracking the effectiveness of the technical environment is key to the success of the project.
- **Work Plan Management:** includes the processes that are used to plan the technical and project management work and the costs of the project over time.

### **Project Management Work Patterns**

Work patterns are a series of steps designed to meet particular project management goals or in response to particular project management situations. These procedures provide step-by-step guidance to the PM to drive consistent execution to minimize risk. The work patterns can be thought of as Standard Operating Procedures (SOPs).

#### ***“7 Keys to Success”***

The Commonwealth’s Program Implementation is a large, complex, multi-layered project. Effective program and project management is central to promoting success. IBM’s project management approach incorporates the “7 Keys to Success.” The “7 Keys” are designed to encourage continuous monitoring and assessment of the critical dimensions that can influence a



project outcome. The dimensions of activity and the risks across most stages of the project management lifecycle need to be managed. Our project management methodology monitors a project's progress and enables us to proactively and continually manage and report the following seven keys throughout the project:

#### Seven Keys to Success:

1. Commonwealth stakeholders are committed. Identifying, evaluating, informing, and influencing individuals impacted by the project. Key stakeholders will be brought into the project as appropriate to provide a customer-centric point of view for the implementation.
2. Enterprise Applications PPEA business benefits are realized. Estimating and monitoring the project's benefits to the client.
3. Work and schedule for the Commonwealth and the Commonwealth Partners are predictable. They control the production and acceptance of project services and deliverables to specified performance and acceptance requirements.
4. The PPEAII program team high performing. Obtaining and maintaining the people, space, and equipment necessary for successful project completion.
5. Scope is realistic and managed. Agreeing, managing and modifying the engagement boundaries.
6. Risks are mitigated. Identifying, managing and communicating risks and issues, mitigating actions, and resolution.
7. Delivery organization benefits are realized. Establishing and agreeing upon project deliverables, and managing and producing them to the contractual standards.



#### Maintenance

The Commonwealth Partners have long recognized the importance of project management when it comes to delivering successful projects to our customers. Over the past several years, the Commonwealth Partners have invested in equipping our many experienced project managers with the necessary integrated methods, education and tools to successfully meet our customers' business needs across the scale of requirements for an enterprise project management solution. The Commonwealth Partners' dedicated, qualified, project management professionals using the Commonwealth Partners' proven methods that are integrated within the Commonwealth Partners' fundamental business processes on a common tool platform, provide our customers with fully scalable project management capabilities that are second to none with several key project benefits:

- Risk is managed more effectively because the project is properly defined, within the customer's business environment, with risks clearly identified and managed.

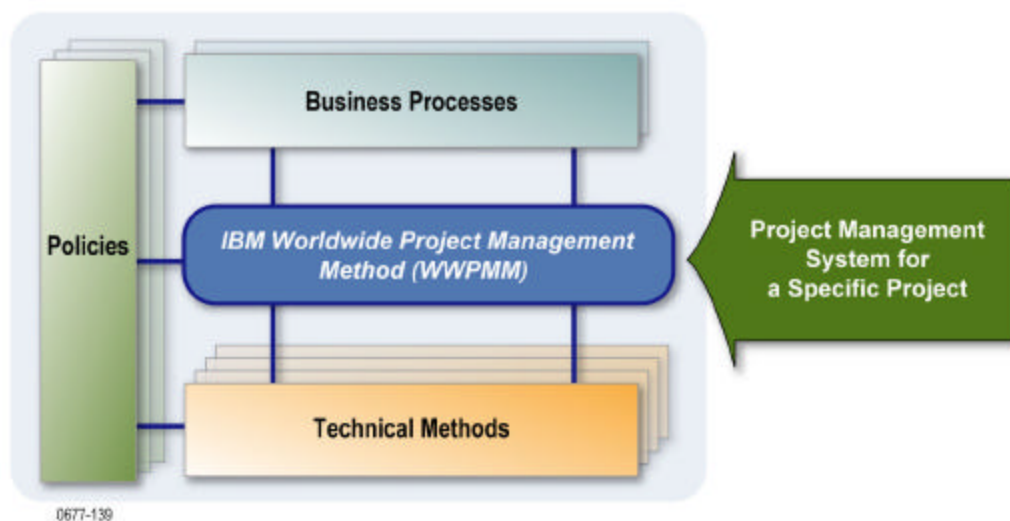
- Productivity is increased by a clear definition of roles, responsibilities and deliverables resulting in faster startup through the use of knowledge management, less rework and more productive time in the project.
- Communication is easier and clearer because customer and the Commonwealth Partners' project teams form more quickly and use common terminology.
- Customer visibility to the project plans, schedule and actual performance against the project objectives is enhanced, helping to increase customer satisfaction.

### The Commonwealth Partners' Project Management System approach

The Commonwealth Partners' structured approach to managing projects includes understanding and adapting to meet our customers' needs and environment. Project Management System is the core of this structured approach. As part of the Enterprise Project Management solution, the Commonwealth Partners have established a reference standard for Project Management Systems. Customization of the Project Management System for customers enables the Commonwealth Partners to facilitate the evolution of Enterprise Project Management.

In Figure 4-12, the Project Management System for a project is the integration of methods, business processes, and policies for that specific project. Underlying this integration framework is a common tool platform. .

**Figure 4-12: Customized Project Management System**



The following sections detail Commonwealth Partners' methods and potential business process integration points. Project success is much more likely with high levels of integration across this framework.

### The Commonwealth Partners' Methods

Four fundamental tenets underlie the Commonwealth Partners' approach to managing projects:

1. **Project Management Process** – The project team focuses on an amount of defining and planning to ensure the customer understands and accepts the scope of the project and its accompanying risk factors to achieve their required business objectives.
2. **Project Organization and Responsibilities** – Members of the project team define and agree the key project team members and their roles and responsibilities including appropriate sponsorship so that project results are met.
3. **Project Phases** - Work is phased to provide the opportunity to reassess risks at key points through the project.
4. **Project Management System** – A management system is established that will define and apply the appropriate governing processes for all project activities.

These tenets, which require early coordination between the Commonwealth Partners and our customers, provide the basic structure of the project and establish the roadmap for a successful journey to project completion.

To provide our teams with consistent methods worldwide, the Commonwealth Partners have developed:

1. Worldwide Project Management Method (WWPMM), which establishes and provides guidance on the best project management practices for defining, planning, executing and controlling a wide variety of projects,
2. The Commonwealth Partners' Vision to Value Method, which provides guidance on the technical aspects of the project, and
3. Integrated Product Development (IPD) / Integrated Services Development (ISD) systems – which are business process management systems used in business units developing asset-based offerings and solutions.

The goal of the Commonwealth Partners' methods is to provide proven, repeatable means of delivering solutions that ultimately result in successful projects and satisfied customers.

The Commonwealth Partners' project management method readily conforms to ISO Quality standards. This means that project managers using WWPMM do not have to spend extra time trying to establish a quality standard for their project as the quality standard is already built into a project's management system.

#### 4.14 Keeping People Trained

The vendor must address how it successfully ensures that any people connected to a particular change are kept up-to-date in terms of training and skills required to make the most productive use of a particular change. It must demonstrate a commitment to human capital.

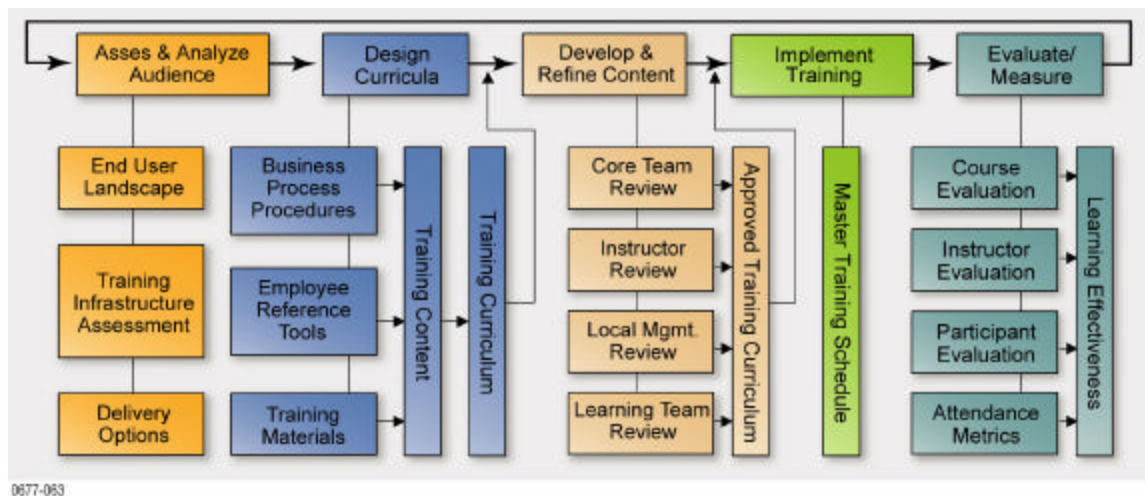
## The Commonwealth Partners' Response

### Implementation

The Commonwealth understands that a willing and well-prepared workforce is key to the success of Enterprise Applications PPEA. Regardless of how much investment is made in a technical solution, a return on investment cannot be realized without employees who understand the new technology and are able to effectively use its capabilities. Our approach is designed to equip users to do their jobs effectively, embrace the new manner of working, and deliver expected results of the project.

We utilize the proven ADDIE training approach - **A**ssess and Analyze Audience, **D**esign Curricula, **D**evelop & Refine Content, **I**mplement Training, and **E**valuate/Measure. These stages occur in sequence and are repeated for each tower.

Figure 4-13: Commonwealth Partners Training Approach



**Analyze the Audience:** The key step in developing a successful training strategy is to understand the distinct needs of each Tower's end users. We will analyze each user category to determine who needs to know what information, when they need to know it, and what the appropriate delivery mechanism is for each category. Specifically we will seek to understand workforce and job impacts, locations of user roles and positions, current skill sets and new skills required and the technology proficiency of users. Additionally, we will account for the different types of training needed for each tower, including training on software, hardware, and process and policy changes. We will identify learning gap and develop plans to close them. At this stage, we will also work with the Commonwealth to identify training facilities and identify potential delivery mechanisms, to include using a train-the-trainer approach and/or super user concept.

**Design Training Plan and Curriculum:** To maximize resources and implement a cost-effective training program, we will develop a comprehensive and detailed Training Plan. Our objectives for developing this plan are to: 1) reinforce knowledge comprehension; 2) train employees on what they need to know and do to perform their jobs effectively in the new environment based on their job roles; and, 3) implement a blended training delivery solution that considers various training delivery mechanisms. Training plan development will include a strategy, which outlines

the scope, roles and responsibilities, deliverables, audiences, and deployment timeline throughout implementation. We will also detail a plan to address the specific curriculum for each user category. We will also develop training materials, which will include training class presentations, instructor guides, user guides and job aids, leveraging existing content documentation tools, if applicable.

**Design, Validate and Refine the Content:** We will validate the curriculum, training content and schedules with the towers/teams and other stakeholders to ensure relevancy and accuracy, gain support and meet business needs. The Project Team, trainers, and other representatives from the Commonwealth will test materials and exercises prior to delivery.

**Deliver Training:** The Towers/Teams who have designed the new solution will train end users. We envision a teaming approach that involves both Team IBM and Commonwealth project team members as instructors to:

- Increase trainees' perception of training and solution credibility
- Continue building internal knowledge and expertise on new business processes & roles
- Drive continued, shared understanding of impact of new systems/ processes to the functions/organizations
- Build depth of understanding in new technologies within partner- and Commonwealth team leads
- Develop increased, ongoing training competency within the Commonwealth

We will work with leaders to apply resources optimally during training in order to support continuing operations and drive training attendance.

**Evaluate and Measure User Adoption:** Our Change Management approach is focused on the delivery of key outcomes, including user adoption. Traditional training approaches and metrics focus on measuring user participation in training courses. The Commonwealth Partners' training approach and metrics focuses on user adoption and execution of the new processes, systems and tools. The following are key focus areas:

- Participant evaluation of training content and delivery
- Ability of users to execute new processes/systems at their desks
- User understanding of new processes/systems within a Commonwealth business context
- Sufficiency of user rate/accuracy to avoid rework and disruption to client satisfaction
- Achievement of overall project objectives, including service delivery and user adoption

This outcome-based approach to training and measuring training results will help to capture lessons learned, improve content and facilitate a smooth transition for each tower. We will work with the Commonwealth early in the project to customize this approach in order to meet the Commonwealth's unique needs.

## **Maintenance**

The transitioned employees will be trained to assume support and maintenance responsibilities as part of the Commonwealth Partners Maintenance Service team. This team will be responsible for supporting each rollout of new Enterprise Applications including the new single instances of PeopleSoft and Oracle.

Knowledge Transfer is a key tool used for the ongoing training of the maintenance team. The purpose of Knowledge Transfer is to acquire the necessary knowledge of the new Enterprise Applications' specific processes and requirements for the Commonwealth Partners maintenance team to successfully support the new applications. The process is accomplished through documentation reviews, knowledge transfer workshops and targeted shadowing for critical business processes and applications. There will be an integration of members of the support team within the implementation team which greatly improves the knowledge transfer process and will be utilized by the Commonwealth Partners.

This knowledge transfer occurs throughout the transition process for each new Enterprise Application.

## **4.15 Performance Management**

The vendor must address its approach for setting performance objectives and how it monitors progress towards them. It must also explain its internal incentives for reaching agreed upon performance levels.

### **The Commonwealth Partners' Response**

For a program as complex and wide ranging as the Enterprise Applications PPEA Program, Performance Management has two components, Project Performance and Individual Consultant Performance.

#### **Project Performance**

During the seven year duration of the Commonwealths Enterprise Applications transformation, many projects will be undertaken, Commonwealth priorities may change and there will be changes in administration. For these reasons, it is important that the performance of the project be regularly assessed. As part of a yearly program planning cycle that includes the development of the future plans for the Commonwealth the assessment of the completed and ongoing projects and the services provides must be completed.

The purpose of the performance assessment is for the Commonwealth Partners to conduct a review with the Commonwealth:

- The value provided by the projects and services that have been completed
- The value expected from projects and services planned or under execution

While this is normally an annual process occurring at the anniversary of the start of the program, it may be used as often as necessary.



The steps the Commonwealth Partners take to completing a Performance Assessment are

1. Review Project status reports and any available measurements relative to achieving the goals or mission and sponsor satisfaction.
2. Identify any gaps between accomplishments and objectives.
3. Consider any changes that occurred during the cycle period that affect the business needs that were originally scoped by the project. Among thing to consider are:
  - Any changes that affect the already identified business needs
  - New business needs
  - Market evolution including new competitors or emerging technologies
  - Economic factors (for example, the economy at large or factors affecting the pricing of the Agreement )
4. Update the business needs and priorities. Determine joint objectives with the Commonwealth.
5. Determine what, in the overall approach and planning framework, should be modified in order to reflect any updated business needs and information about results already obtained by the project. Update the Project definition (strategic level) accordingly.
6. Create or update the Project definition or initial Project definition for any individual projects that will help achieve the updated strategy.

The outcomes of the performance assessment are:

- Projects being moved forward, delayed, or canceled.
- Services being extended in scope and performance.

After each Project Assessment any new strategies or activities are communicated to the appropriate Commonwealth organizational units and activities are launch to gain formal agreement on new strategies, projects or services, if necessary.

### **Individual Consultant Assessment**

The success of the each project within the Enterprise Applications PPEA program as well as the program's overall success is dependent on the performance of the Commonwealth Partner's staff assigned to the projects. For that reason, the Commonwealth Partners have a formal Project Performance Assessment process that will be followed for the Enterprise Applications PPEA program.

At the beginning of each consultant's assignment to an Enterprise Applications PPEA project, the consultant will meet with the Project Manager and individual performance objectives will be established. The performance objectives will be directly linked to the consultant's assignment on the project and will include not only the objectives for the tasks assigned to the consultant but also the performance of administrative tasks including status, time and expense reporting. The objectives will be documented in writing. Every six months or sooner if warranted, a formal assessment of the consultant's achievement of the objectives will be completed by the Project

Manager. The assessment will include a discussion of the consultant's performance, an assessment of the skills that they have demonstrated and acquired and a plan for the acquisition of new skills if necessary for continuing acceptable performance on the project.

The Commonwealth Partner's use the Performance Assessment for a number of internal programs:

- **Annual Performance Reviews** – Every Commonwealth Partners' employee receives an Annual Performance Review. The Project Performance Assessments are a major component of the Annual Review. As matrixed organizations, the individual consultant's line manager is responsible for the Annual review but is not normally accountable for the employee's day to day performance. That is the responsibility of the Project Manager. The Performance Assessment is the major communication between the line manager and project manager and is relied upon by the line manager in assessing the employees overall performance.
- **Incentive Compensation** – All Commonwealth Partners' employees participate in an incentive compensation program. One of the major measures in the program is the individual's annual performance rating.
- **Professional Development** – The Commonwealth Partners have established a formal internal process for the evaluation and classification of employees' professional skills. The primary input into this process is the Project Performance Appraisal. In the performance appraisal, the project manager is required to assess the employee's skills against a predetermined matrix of skill levels. When an employee believes that they have acquired the necessary skills to reach him next formal level of skill in their selected profession, they complete an application for movement to the skill level. The application must be supported by evidence that the employee can perform each skill at a sustainable level. The evidence is provided in the performance assessments. Independent evaluators review the applications and assign the employees to the appropriate skill levels. Skill levels are used by the Commonwealth Partners to determine the roles that employees are assigned to on projects and movement from one skill level to the next is a prerequisite for consideration for promotion with in the Commonwealth Partners.

#### 4.16 Approach to Ongoing Support

The vendor must explain the approach it would use to support various implementations of reengineered and re-solutioned processes in the Commonwealth. This approach must have a proven track record of success.

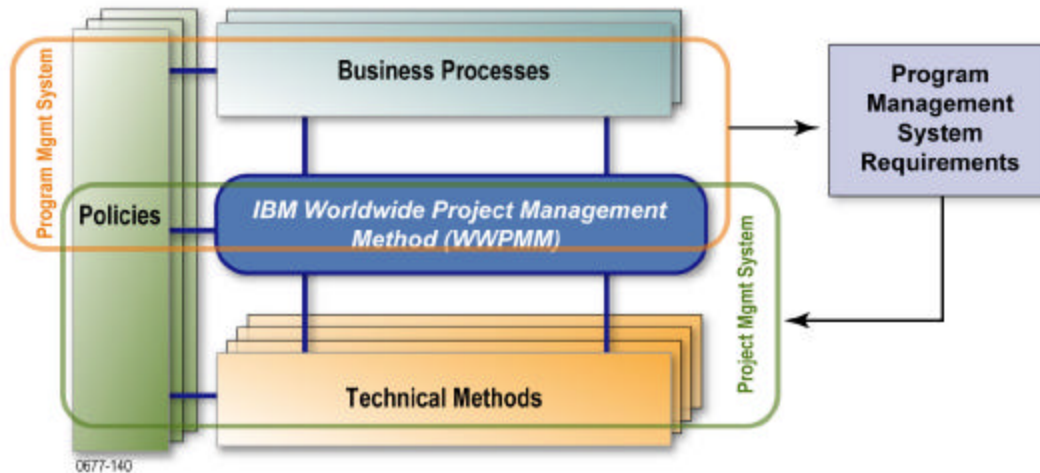
#### The Commonwealth Partners' Response

##### Implementation

The building blocks for all programs are projects. This makes it imperative for a program manager to have a good understanding of the characteristics of a project. This allows the program manager to fully utilize projects as he/she plans and defines the content of the program. IBM's WWPM is used in all of IBM's worldwide organizations, and it supports the

management of projects *and* programs. A program is defined as ***a group of projects managed in a coordinated way to obtain benefits not available from managing them individually. Many programs also include elements of ongoing operations.***

**Figure 4-14: Program Management System (PGMS)**



The Program Management System (PGMS) defines the overall program management for all of the areas of the program. It is similar to the Project management system except that its boundaries extend farther into the business process and policy components.

The Program Management System defines the policies, business processes and WWPMM components that will be used at the program level and for all projects and operations. As the program manager plans and defines the PGMS, he/she has the opportunity to specify those policies and controls necessary for the holistic management of the program. At the project level, the project manager will define their project management system to comply with the PGMS requirements and those policies, business processes and WWPMM components that are required for the project by their organization. The items in the project management system must support those in the program management system. If there are conflicts between the systems, the program manager must resolve them before the project is started.

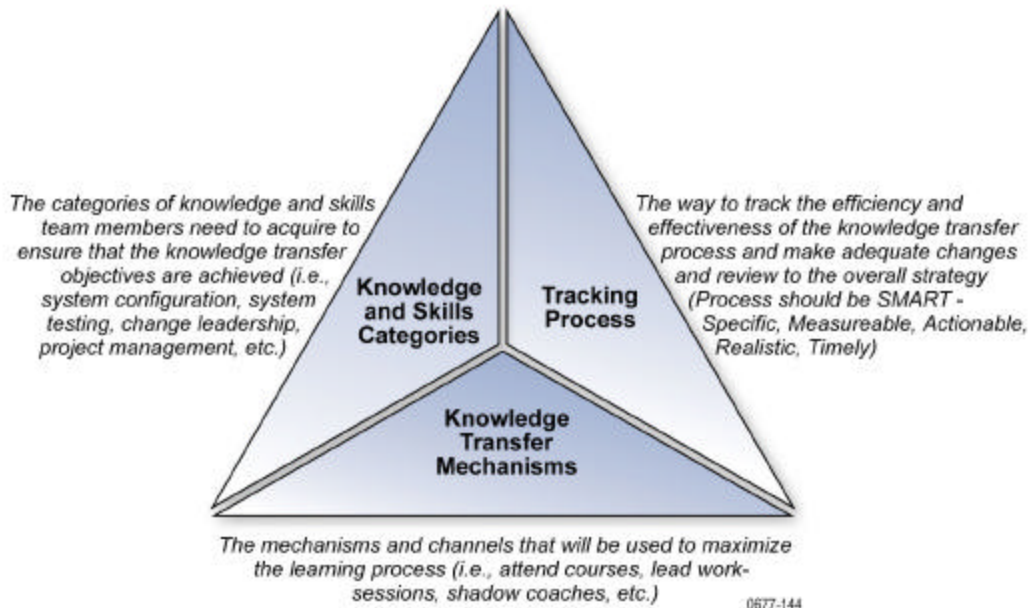
Unless the program manager has a specific need, the technical method used for any project will be determined by the delivery organization provided that the method provides for isolation of program level items such as risks, issues and other control items. Specific program needs could be the result of the program *Agreement* with the program sponsor, or to provide control points for the program manager. In all cases these exceptions should be part of the Program management system and should be kept to a minimum.

### Knowledge Transfer

Knowledge Transfer, the sharing of knowledge and skills (i.e., tools, methods, etc.) in support of the execution of projects, is an important aspect of any project. True knowledge transfer develops skills within a client organization so that clients can operate and manage the new business without assistance from a consultant after the completion of a change initiative.

A Knowledge Transfer program needs to address:

- the Knowledge and Skills to be transferred (typically from consultant to client partner)
- tracking of the Knowledge Transfer process
- mechanisms for transferring Knowledge



Benefits for a Knowledge Transfer program include:

- Allows client organization to become self-sufficient so that it can proceed through future change initiatives independently or with reduced need for consultants – this in turn will reduce external costs
- Increases capacity for developing and sustaining a learning organization for continuous improvement
- Allows clients to take ownership in the project which will increase commitment and buy-in
- Facilitates a structured environment where everyone is transferring knowledge in the same manner
- Allows for a measurable and sustainable process
- Allows more efficient resource planning across the life of the project
- Reduces risks of problems due to key resources leaving project before implementation

### Maintenance

The Commonwealth Partners will transition each new Enterprise Application from the Implementation Team to the Maintenance Team upon successful implementation of that Application. A knowledge management approach is vital to provide training to facilitate the development of knowledge and skills of the maintenance team on the new Enterprise Applications. Knowledge management focuses on technical knowledge and skills, related to the

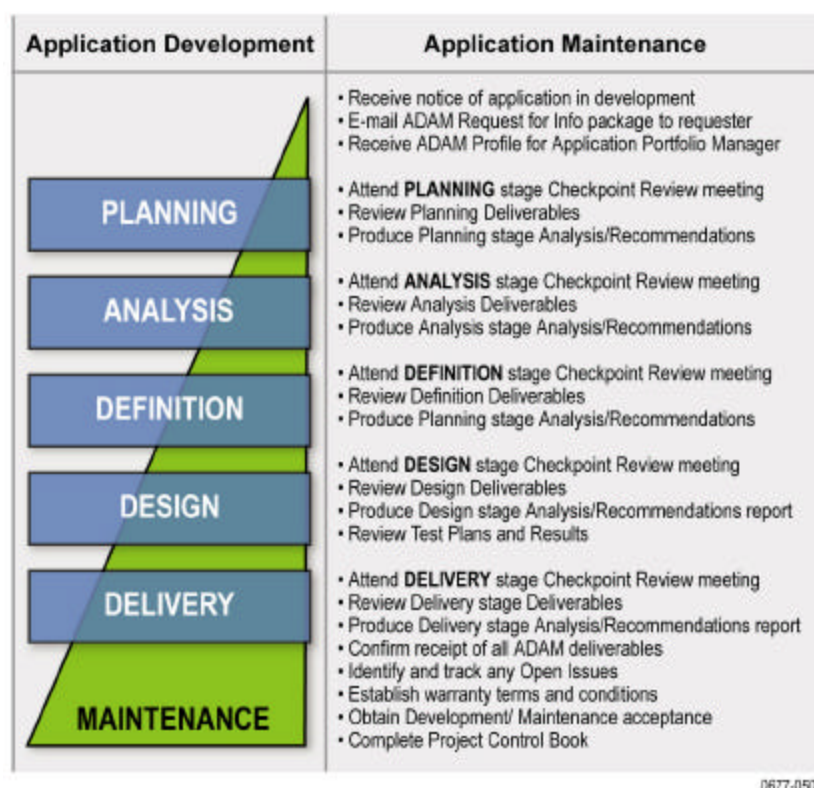
specific needs of the individuals who will be assigned to the maintenance of the new Applications.

Our knowledge management approach provides a structured means for establishing and delivering training to the distributed maintenance team on the maintenance and support activities required for the new Applications. Knowledge management activities align with the application development activities so that the maintenance team participates in activities needed to learn and understand the new Applications as it is being developed and tested. Throughout the process of design, build, test, and implementation the maintenance team will be involved.

The Commonwealth Partners recognize the many benefits of early participation of the maintenance team in the development process of new Enterprise Applications being developed. This process describes how the Commonwealth Partners maintenance team participates as a member of the Commonwealth Partners Application Development Team throughout a project. The Maintenance triangle on the following chart shows levels of involvement that increase as the project moves through the development stages until the actual turnover into Maintenance upon acceptance of the final developed and tested production system.

During the development life cycle, the maintenance support team is involved by reviewing initial planning, analysis, definition, and design documentation. The Commonwealth Partners maintenance team becomes fully involved during the delivery phase and accepts the new product into maintenance after a minimum of four weeks of successful production execution with all open problems and issues resolved.

**Figure 4-15: Commonwealth Partners'**





## 4.17 Disposition of Approved/Active Projects

The vendor must address how it would approach the reality of approved/active projects in the Commonwealth that may directly or in-directly overlap with the intent and direction of the partnership. It must address its approach and reasoning for those approved/active projects that should remain separate, but would potentially interface with the reengineered and re-solutioned processes asserted by the partnership. Examples of projects and initiatives to consider include, but may not be limited to the current list of ITIB approved projects. The vendor must also consider any Commonwealth project activities with which they are engaged.

### The Commonwealth Partners' Response

#### Implementation

The Program Management Office (PMO) is part of the overall proposed solution for Enterprise Applications PPEA. The PMO will coordinate and control all projects that are under the agreed upon scope that is defined in the Project Charter. Program management creates a framework which:

- Provides discipline and management consistency across the organization
- Provides timely and effective communication
- Facilitates day-to-day activities
  - Issue identification and resolution
  - Status Reporting
- Delivers a composite view of interdependent project activity
- Provides staff and tools to coordinate reporting functions

Effective, enterprise-wide program management will enable the Enterprise Applications PPEA:

- Merger integration activities to move at a rapid pace
- Risks to be appropriately managed
- Rigor and discipline around all project activities
- Early identification and resolution of key issues
- Timely decision making
- Proactive and collaborative communications

The PMO will provide program management for all projects that fall under the Enterprise Applications PPEA umbrella. Projects that are not managed by the PMO but are directly affected by Enterprise Applications PPEA should be managed by a document of understanding (DOU). The

**Figure 4-16: PMO Provides Management for All the Enterprise Applications PPEA Projects**





DOU should define the following between the Enterprise Applications PPEA PMO and the adjunct/outside project:

- Scope
- Parties/Projects Involved
- Duration
- Change Management Process
- Assumptions
- Enterprise Applications PPEA Responsibilities
- Adjunct/Outside Project Responsibilities
- Signatures

#### **Maintenance**

The Commonwealth Partners will transition all in-scope agency and Enterprise Applications from the Commonwealth to the Commonwealth Partners utilizing the Commonwealth Partners' Transition and Transformation Methodology which is an accumulation of best practices that the Commonwealth Partners have developed by providing Transitions/Transformations in their many worldwide accounts which enables non-disruptive services and smooth transition of people and in-scope work.

### **4.18 Service Level Expectations/Agreements**

The vendor must address its approach to establishing, monitoring, and achieving service level expectations/agreements for various process reengineering and re-solutioning implementations.

#### **The Commonwealth Partners' Response**

##### **Implementation**

During the Design Phase of each project, a testing plan will be developed. The Testing Plan documents the scope and objectives, the purpose, the key milestones, and the resources for all levels of testing. Service level expectations are established during the test planning. Service Level expectations are defined as part of the entry and exit criteria.

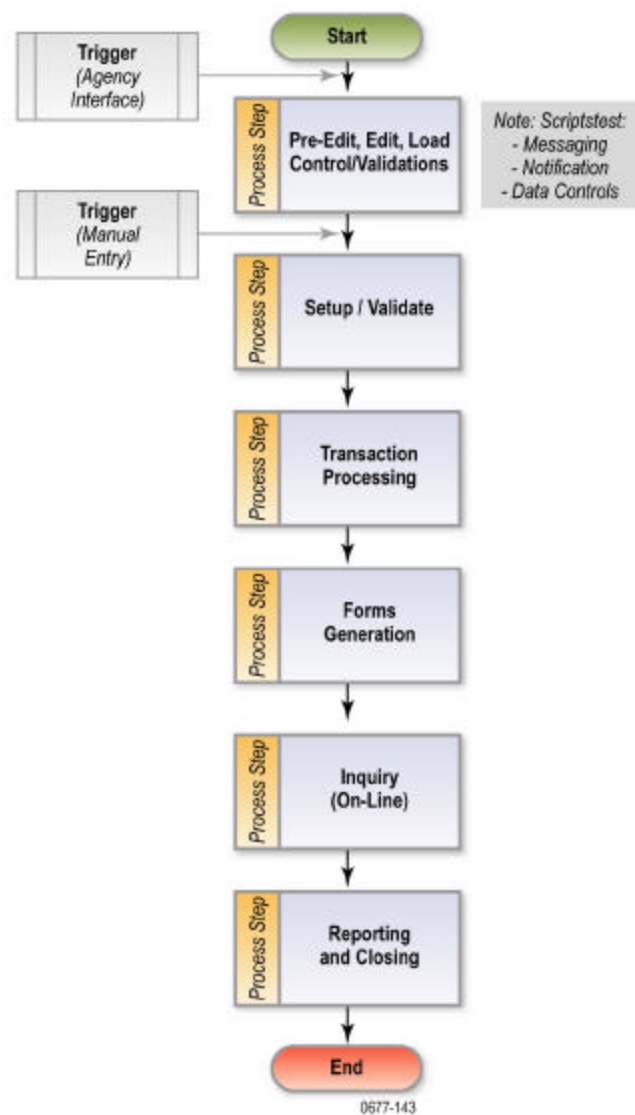
The Entry Criteria for each test are applied to each business process or to each group of business processes that must be tested together. Business Processes must be tested in the testing environment before all these conditions are met. Examples of entry criteria are:

- Test Scripts that provide a full range of testing are prepared, reviewed and understood by testers
- Rooms Scheduled and Available
- Agency and project team staff scheduled and available
- Required data conversions are complete
- Agency sample test data is gathered and is summarized and prepared for testing

- Required Modifications, Interfaces, Forms and Reports are complete, unit tested, functionally tested
- Environment is ready, validated and available

Test processes are covered in the Test Planning document and in the test scripts for each business process. Generally the testing process will follow this model in Figure 4-17.

**Figure 4-17: Model Testing Process**



The **Exit Criteria** for testing are:

- All tests have been completed and the results logged.
- No Test-Stopper or Go-Live-Stopper level Test Problems are unresolved.
- All Business Processes for this phase have been completely tested.
- Any issues or problems discovered in testing process have been logged.

- Any severe issue or problem discovered during testing has been escalated to the Project Issues Log.
- All changes to the Test Scripts are complete.
- The test results, issues and problems have been summarized and reported to the Project Management for review.
- All test issues, problems or defects which will impair the conduct of the state's business must be corrected prior to go live.

### Maintenance

The Commonwealth Partners will provide the standard service level shown in the following sections at the start of the Maintenance Services period and will review jointly with The Commonwealth after the first 90-120 days has elapsed after the commencement of new Enterprise Application maintenance services to determine if service levels are appropriate.

### The Commonwealth Partners' Enterprise Application Solution Center Hours of Operation

The new Enterprise Application maintenance Solution Center will receive Service Incidents from The Commonwealths' Help Desk 24 hours a day, 7 days a week. The Enterprise Application support Consultant(s) will be readily available during the Primary Support hours noted in the table below and will be on call during Secondary Support hours, also noted in the table below.

Function/Module Supported	Primary Support Hours (EST)	Secondary Support Hours (EST)
All Enterprise Application Modules included in Scope	8:00 a.m. to 6:00 p.m. Monday through Friday (excluding The Commonwealth's observed holidays)	All Other

- **Primary Support** provides User Support for Service Incidents of all Severity Levels; and
- **Secondary Support** provides User Support for Severity Level 1/2 or 3 Service Incidents only, with all other Severity Level Service Incidents logged during the subsequent Primary Support window.
- **Pager Support provided for Severity Level 1/2 or 3 Service Incidents during secondary support hours.**

### Service Incident Severity Level Definitions

The Severity Levels described in the following table will be used to categorize all User Support Service Incidents from The Commonwealth internal help desk. The Severity Level will be assigned initially by The Commonwealth Help Desk and validated by the assigned Enterprise Application support Consultant(s) and/or the Enterprise Application support Manager.

Severity Level	Service Incident Characteristics
1	<ul style="list-style-type: none"><li>▪ Service Level Objective missed</li><li>▪ Severe impact on client productivity</li><li>▪ Severe corruption of data</li><li>▪ Requires immediate change</li></ul>

Severity Level	Service Incident Characteristics
2	<ul style="list-style-type: none"> <li>Significant impact on client productivity</li> <li>Issue directly affects end-user</li> </ul>
3	<ul style="list-style-type: none"> <li>Significantly reduces system effectiveness</li> <li>Required for next major processing (such as month-end/quarter-end)</li> </ul>
4	<ul style="list-style-type: none"> <li>Workaround is available</li> <li>Several methods to resolve issue</li> </ul>

## Service Incident Response Times

Service Incidents will be responded to and status will be reported according to the assigned Severity Level. The planned response time for Service Incidents of each Severity Level is shown in the following table. Note: time is measured during committed hours of service for non-severity level 1 and 2 issues.

Assigned Severity Level	Service Incident Response Time (Initial Call Back Time)	Subsequent Updates
1	Within 15 minutes	Every hour
2	Within 2 hours	Every hour
3	Within 4 hours	As mutually agreed upon
4	Within 6 hours	As mutually agreed upon

It is understood that in some cases, these service incident response times may require modification based on specific needs. The Commonwealth Partners and the Commonwealth will work together to develop a mutually agreed to response time in such cases.

## 2) Operational Service Levels

The Commonwealth Partners will also provide the following service levels specific to supporting new Commonwealth Enterprise Applications:

	Service Area	Service Type	Service Level Description	Service Level Target
1	Help Desk – Call Response	Call Response	Length of wait time in telephone queue during Primary Hours of Operation	TBD
2	Help Desk Availability	Availability	Primary Hours of Support	Mon – Fri 8:00 AM to 5:00 PM
3	Application Tuning	Support	Application and database tuning	TBD
4	Change Management for Enhancements to Enterprise Application base	Estimated level of effort	Respond to an approved change request providing a change proposal outlining a proposed solution	TBD
5	Batch job scheduling	Adjust schedules for batch processing	Implementation of changes to batch schedules	TBD
6	On-line Enterprise Application System Availability – Production Database	System Availability	Within the first xx days of the contract, within the next xx days of the contract, after xx days	TBD
7	Batch Window	Batch Completion	Successful completion of batch processes	TBD

	Service Area	Service Type	Service Level Description	Service Level Target
8	Interface Support	Creation and delivery of files	Successful delivery of files in accordance with defined schedules and processes	TBD
9	Release schedule for changes	Migrations	Scheduled implementation of change requests and fixes	TBD
10	Security Maintenance Requests	Security Administration	Responding to requests for operator id additions/deletions and changes.	TBD
11	Security Password Reset	Security Administration	Resetting "Passwords" in accordance with established procedures	TBD
12	Software Upgrade Support	Migrations	Scheduled implementation of upgrades	TBD

The Commonwealth Partners and the Commonwealth will work collaboratively to determine the appropriate Service Level Targets.

#### 4.19 Related Policies, Procedures and Standards

The vendor must address any related policies, procedures and standards not explicitly referenced in this or any other section that have a material impact or influence upon their proposed methodology for reengineering and re-solutioning processes in the Commonwealth. The vendor must acknowledge that all such policies, procedures and standards must comply (or not conflict) with Commonwealth policies, procedures and standards now or in the future unless explicitly accommodated by the Commonwealth

#### The Commonwealth Partners' Response

##### Implementation

At this time, to the best of our knowledge and belief, the Commonwealth Partners do not know of any related policies, procedures, and standards not explicitly referenced in this or any other section that have material impact or influence upon our proposed methodology for reengineering and re-solutioning processes in the Commonwealth. To the extent possible, given the ever-changing environment, the Commonwealth Partners will make commercially reasonable efforts to apply its proposed methodology for reengineering and re-solutioning without conflict to the Commonwealth's policies, procedures, and standards,

##### Maintenance

There are no additional policies, procedures and standards to be addressed for the maintenance environment.